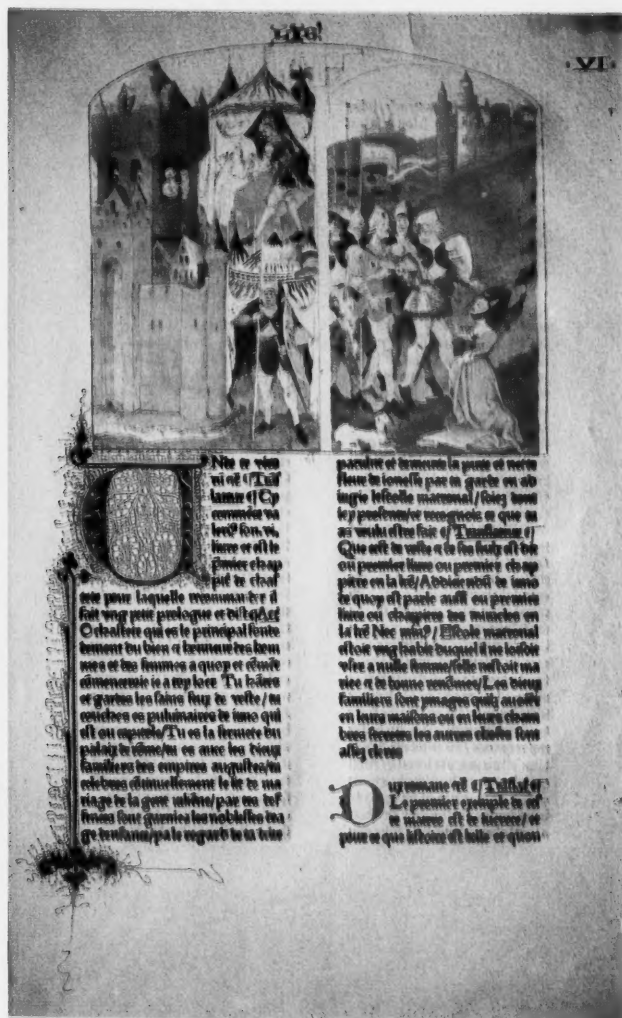


April 1978

The
Quarterly Journal
OF THE LIBRARY OF CONGRESS



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The Quarterly Journal

OF THE LIBRARY OF CONGRESS

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Editor's Note

April being the kindest month for pilgrimages, this issue of the *Quarterly Journal* offers four articles intended to serve as treasure maps—enticements to the reader that we hope will inspire new explorations of images and imagination. Their subjects range from the mysteries, messages, and media of creativity to a gentle revolution, from arts within crafts to forms that transcend functions. The legacies described are uncontested, and all of them require more involvement than can be established here. Our authors invite the reader to travel further, to explore originality in the original, to venture into the rich territories charted in these pages.



The strangest and most elusive of these worlds is the creative process itself:

Did he ever wonder, Mr. William Shakespeare, with a kind of awe, where it all came from, scene after scene that assaulted his imagination as if he had lived each one?

Such speculations are slightly unsettling. The map shows directions clearly, but the orientation is unfamiliar:

If time is an eternal present, as I believe it to be, pre-cognition is inevitable for those whose narrow human slits of awareness are widened on certain occasions so that they know ahead that which, according to human time sense, still has not happened.

The speaker is not Madame Sosostri, whose wicked pack of cards we learned to respect when she turned up the drowned Phoenician Sailor, but Eleanor Cameron, who leads us on a journey through some familiar lands that soon appear more foreign than we had imagined. The territory suddenly seems to be not merely unmapped but unmappable.

We come away from these explorations not only wondering but also with our own sense of awe at the fact that we have all become a privileged class, able to relive an infinite variety of scenes whether or not we are concerned with "where it all came from."



Fortunately, the products of creativity are territories much more familiar than the creative process itself. "My library was dukedom large enough," says Prospero. How much vaster is our domain today, encompassing brave new worlds undreamed of by Prospero or his creator.

But if the book turned time past into an eternal present, it is the printed book that has broadened the creative universe, bringing both past and present into the lives of vast generations of readers. Nicolas Barker discusses that most far-reaching of revolutions, the invention of printing, in the first of a series of lectures on the book being presented at the Library of Congress through the generosity of Mrs. Charles William Engelhard.

Printing did not transform the book into a mere vehicle for ideas, however, and Mr. Barker's lecture reminds us that books remain a strange blend of language, technology, craftsmanship, and art. They retain an existence outside their content and become objects of beauty in themselves.

In a second Engelhard lecture, Philip Hofer presents some examples of the book as pure art. Our reproductions do not begin to do justice to his subject, and we hope that readers will be inspired to undertake spring pilgrimages of their own to examine some of the originals.



In Miguel de Unamuno's *Niebla* Augusto Pérez, whose world is dreamed not by the author but by the reader, states: "La función más noble de los objetos es la de ser contemplados." Walter Ristow makes it clear that it is not only books that can be profitably contemplated as objects whose purpose is at least dual. The Hauslab-Liechtenstein Collection contains a wealth of materials that lend themselves to that most noble function, and once again the reader is challenged to see for himself.



The Library of Congress holds infinite treasures that combine images and imagination. One objective of the *Quarterly Journal* is to make pilgrims of its readers.

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THE INVENTION OF REVOLUTION WITHIN

by Nicolas Barker

Within a year or two after 1450, two events took place which struck contemporaries as symbolic of the end of one age and the beginning of a new: in 1453 Constantinople fell to the Turks, and about the same time the invention of printing was brought to fruition. The fall of Constantinople, long the one great city of Europe, was immediately recognized as being significant, but it was some time before it was seen to be the last link in a chain of events which also led to the invention of printing. If you see Europe as two triangles, one to the northeast, flat and landlocked, the other southwest, mountainous and maritime, the line of the Turkish advance appears to follow the border of the two areas, the line marked by the Danube and the Rhine. Its pressure led to a general drift northwestwards. The pressure was felt in political, economic, and cultural terms (remember that among the first products of the press were the indulgences to raise money for a crusade). The epicenter of this movement was the Rhine basin, and there the invention took place.

Nicolas Barker is editor of the *Book Collector*, head of Conservation at the British Library, and author of several works on the history of books and printing, among them *Stanley Morison* (1972) and *Bibliotheca Lindesiana* (1977). This lecture was presented at the Library of Congress on November 4, 1976, and was the first in a series of lectures on the book sponsored by Mrs. Charles William Engelhard in memory of her husband.

This would hardly have struck a contemporary observer, who would not, however, have missed the force of economic pressure. Looking back, the thirteenth century must have seemed a golden age. Since then, poor harvests, the Black Death, and general political unrest (of which the Hundred Years' War was only part) had brought about a decline in the standard of life. In economic terms, men had to work harder to make a profit or even survive. Necessity is the mother of invention, and two earlier inventions later to be bracketed with printing, gunpowder and the mariner's compass, began to be exploited. In commerce, new types of merchandise were sought, and new trade routes explored. Roads improved but were still too bad for heavy freight, for which carriage by water was essential. Inland waterways were enlarged and artificially expanded by canals. Barges increased in number and size, as did the standard Mediterranean "round ship"; sea-going Venetian and Genoese galleys met the northern cogs and hulks in the Atlantic; and the faster, more seaworthy carracks and caravels were developed, which made Columbus's voyage possible. Surviving portolans chart the growth of this traffic.

Rapid expansion in the thirteenth century had improved technology, and in many directions, from cannons to clocks, there was a new demand for metal work and thus for its raw materials. Iron was found in Westphalia, Saxony, and Bohemia, nearer to the main sources of demand than the traditional iron-producing areas, Spain and Sweden. If England still produced most of the exportable lead and the tin

PRINTING REVOLUTION

necessary for bronze, copper and silver came from Saxony, the Harz and Vosges mountains, Bohemia, and further east. All this gave a new boost to southwest Germany; the discovery of calamine led to the revival of brass-work, an art lost since Roman times, and silver in particular made fortunes for the great Augsburg banking dynasties of Fugger and Welser. Other staples were affected by the movement. The north German Hansa, based on fish, salt, timber, and grain from the east, was in decline. The cloth trade was moving out of Flanders toward England, although the established market for Flemish weavers of cloth to be finished in Florence maintained a busy traffic on the Rhine.

The base of commerce was not the voyagers, but the resident capitalists. They were commonly organized in *societates* or "ventures," formed to provide ad hoc finance, sharing cost and risk, for a particular purpose—a voyage, a building, an order, or a harvest. As trade spread, complicated credit transactions based on bills of exchange grew up, partly to avoid currency problems and partly to circumvent the Church's ban on usury. (In all probability, these fluid arrangements underlay the early development of printing. Our tabulation of presses, by printers, types, and colophons, may be a misreading by hindsight of the established commercial methods of the sixteenth century and later: traces of ad hoc syndicates can be seen in the second "press" at Paris, "au Soufflet Vert," and the *Societas Colubris* at Florence.) Industry was still largely bespoke, based on the individual crafts-

man and the small workshop, but, like commercial organization, it was capable of great flexibility. In 1427 two Milanese armorers met an order for equipment for 4,000 horsemen and 200 infantry in a few days.¹ Some of this no doubt came from stock (war supplies must have been a sound speculation in fifteenth-century Italy), but the bulk of the order must have been met by subcontracting to every available smith in Milan.

But besides the trade in manufactured goods and raw materials, there was another form of traffic of surprising proportions to us, that of men. People were much more mobile than might be supposed. A war, large building projects, a jubilee at Rome, the standard pilgrimages, all these caused people to travel. The mobility of the early printers, surprising to us, was not so to their contemporaries. Their only essentials were a set or sets of matrices and a type-mold: raw materials, such as paper, the other means of casting type, even joiner's work to make a press, could be had locally.

By 1450 the economic center of gravity had visibly moved west toward the Atlantic seaboard. Maritime trade increased, but so did the importance of the Rhine, the traditional route, the "Duche way" in Chaucer's phrase, by which pilgrims went to Rome, the link between the Low Countries and Italy. Italy, to us, stands for the Renaissance. The common view is that printing was the child of the Renaissance, and both were due to the rediscovery of the ancient world. But, as Denys

Hay has pointed out, however important the influence of the knowledge of the ancient world was to the new movement, it was only part of a larger desire among an increasing number of people "to define afresh their moral, intellectual and aesthetic purposes."² Elizabeth Eisenstein, in a vigorous, elegant, and fascinating article, has shown that many aspects of modern civilization, said to be derived from the Renaissance, were in fact brought about by the press.³ It was, beyond doubt, printing which both provided the means of comparing texts and ideas (resulting in self-knowledge) and fixed knowledge once recaptured, two essential characteristics of the Renaissance. I shall return to this, but meanwhile it is worth reflecting that Petrarch, Boccaccio, Coluccio Salutati, Poggio, Niccolò Niccoli, Lorenzo Valla, and Politian, Masaccio, Brunelleschi, Ghiberti, Donatello, Luca della Robbia, and Piero della Francesca, and all that they stand for sprang from a small republic, proud of its independence, in Central Italy—and that this astonishing efflorescence was precipitated by a struggle for political survival. For this last reason, though the movement spread quickly from Florence to her smaller neighbors, Urbino, Ferrara, Mantua, with concerns like hers, it penetrated much more slowly to the great enemies, Milan and Naples, with their cosmopolitan interests.

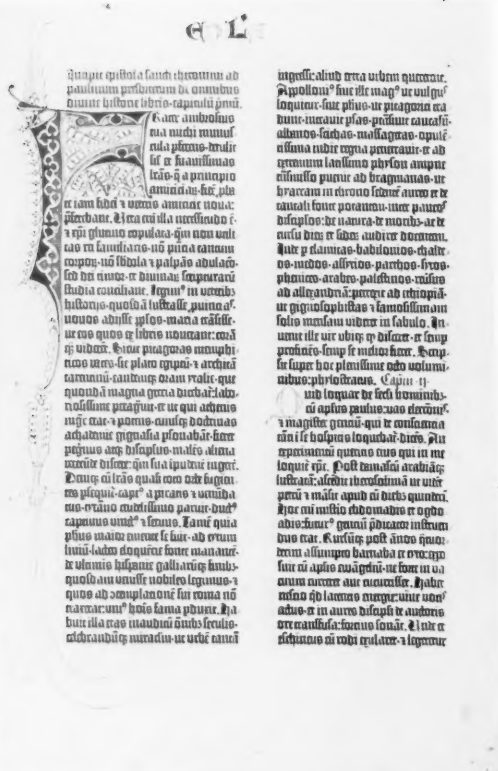
Although the schools of Guarino da Verona and Vittorino da Feltre at Ferrara and Mantua propagated the new learning, it was foreign visitors who came and returned to their own countries, not Italians abroad, that made it more than local. By 1400, Europe elsewhere had achieved in "international Gothic" an aesthetic lingua franca. Later, in the sixteenth century, this was to provide the rails on which the Italian classical style traversed Europe. Now, the direction of cultural expansion ran opposite, from the court of Burgundy up the Rhine. Van Eyck was the dominant artist, whom Antonello da Messina went to visit, and, returning through Venice, passed on what he had learned to the Bellini. Guillaume Dufay in Flanders gave a new direction to the *ars nova*, the musical equivalent of international gothic, and Josquin des Prez spent his working life in Italy. The time for re-export was still to come. A few swallows, like the Italian scholars summoned by Humphrey, duke of Gloucester, John Tip-toft, the humanistic earl of Worcester, or Andrew Holes, protonotary apostolic and customer of Vespasiano da Bisticci, brought it even to Britain, but

neither there nor elsewhere did the movement take root until a group of German scholars from the Rhine basin, such as Conrad Celtes and Rudolf Agricola—Dürer's visit to Italy in 1494 was critical for the arts—came and carried it back. By then the printing press was there to promote and consolidate it.

In this background, it is possible to distinguish certain landmarks which led directly to the invention of printing. First is the general increase of literacy, which began before the press came to accelerate it. Schools and universities increased. The *nova devotio*, the antecedent of reform, with its emphasis on individual piety, encouraged reading. The Brethren of the Common Life played a central part in this movement and in encouraging literacy, first by copying books cheaply and eventually by printing them. It has been calculated that as many as 40 percent of fifteenth-century London merchants could read some Latin. Increased demand reduced the cost of books, and further reductions came from the use of paper instead of vellum and smaller page sizes. Increased literacy reduced dependence on memory and induced the change from poetry to prose in narrative literature. All these trends were accelerated by the advent of printing.

Secondly, there is paper, naturalized in Italy and exported thence in the fourteenth century. Besides reducing the cost of books and written documents, it changed their use. A man could be his own copyist; a book made for one's own private use, a diary or an account book, became a necessity rather than a luxury. Paper also had its disadvantages: it was less durable and less easy to make corrections on than vellum. Moreover, it "could only enliven arts and letters on an ephemeral basis. It could do nothing to lighten the load or increase the output of the professional copyist."⁴ Abbot Johann Tritheim, writing after the invention, observed: "Truly if writing is set down on vellum, it will last a thousand years. But how long will print on paper last? It would be a great thing if it lasted two hundred years."⁵ If Tritheim's fears have proved groundless, they were nonetheless wide-

From Bartholomaeus Anglicus, De proprietatibus rerum, a French manuscript on vellum, ca. 1400. All the illustrations in this article were selected from works in the Library's Rare Books and Special Collections Division.



The first page of the Gutenberg Bible (Mainz: Printer of the forty-two-line Bible [Johann Gutenberg] between 1454-1455? not after 1456). LC-USP6-924A

spread at the time. They were overcome by force of circumstance: paper was kinder to print on than vellum; above all, it was cheaper—an important consideration, when even a small edition required several hundred times as much paper as a single copy.

Lastly, universities had a special position in the new growth of literacy. The new foundations of the fifteenth century are to some extent misleading, since they were sometimes due to political or other extraneous causes—the establishment of universities at Caen (1432) and Bordeaux (1441) and the Scotch universities likewise meant that Paris was inaccessible during the Hundred Years' War. This was a fragmentation, rather than an expansion, of learning. There was also a strong tradition

of oral transmission in universities—the art of memory, the public lecture, viva voce examinations, were all deep rooted and influenced the choice of written texts. But the *pecia* system of wholesale copying from a divided exemplar was a forerunner of printing, both as a simple mechanization of the process of multiplying texts and as a means of stabilizing them. It also redeployed scribes, if in a slightly narrower field. The decline of monastic scriptoria meant that there was less chance now of old books being copied. Universities had other uses. It has been remarked that a high proportion of those who matriculated at universities failed to complete the course.⁶ This was not just due to boredom or lack of funds: matriculation was the qualification for a profitable appointment in the university. For example, the university stationer, thus qualified, knew the market and demand for the texts in which he dealt. This knowledge provided an essential service to the early printers in search of a steady large-scale demand for their books.

The growth of literacy, the impact of paper, the semi-mechanization of university book-production and demand—all these factors interlocked to open the door to the invention of printing.

Printing was, essentially, a metallurgical achievement. Gutenberg's family, one of the patrician clans of Mainz, were traditionally goldsmiths, and his father was connected with the mint (it is significant that the first printers at Basel were conscribed into the goldsmiths' guild).⁷ The press itself was made of wood, but this was the least factor in the new invention; its action had long been known and used, notably for finishing paper. The invention was really twofold: it involved first the application of the art of cutting a letter on an iron punch to be struck into a copper matrix, in which multiple images of the letter could be cast in a softer lead alloy; and second the invention of the type-mold, adjustable to fit matrices of different widths. The first of these was less original, drawing on a traditional metal-worker's skill. The use of the punch and matrix was well known, and other minds besides Gutenberg's were working on adapting it to produce readable letters. In the 1440s Jean le Robert, abbot of St. Aubert at Cambrai, noted the purchase of a *Doctrinale* "jeté en moule" (cast in a mold). More striking are the records of Procopius Waldfogel, a goldsmith from Prague (both trade and place are

significant), who was at work at Avignon about 1444-46. His work, described as "ars artificialiter scribendi," involved two alphabets in steel, forty-eight "forms" (a word later used for types), and steel, copper, lead, tin, and other metals. It sounds as if letter-punches were part of his scheme, although the "forms" may be pages rather than letters. No further trace of his activities survives.

The adjustable mold was Gutenberg's real secret, and he apparently had devised it by 1439, when, after the death of his partner Andreas Dritzehn, he demanded not only that all the existing "forms" should be melted down, but also that an object with two screws should be dismantled and its four pieces "laid on the press so that their purpose should not be apparent."⁸ Why, if Gutenberg had achieved so much by 1439, did it take another ten years or more to produce the first printed examples?

The answer lies in a special problem connected with the first part of Gutenberg's invention. Although punch and matrix were familiar to goldsmiths (as early as 1436 Gutenberg paid Hans Dünne, a goldsmith, "only for that which pertains to printing"⁹), movable metal type presented a special problem. The types, set next to each other, had to have the current conjoined appearance of writing. In later times, when type manufacture was an established trade, separate from printing, and, further, letter design had been much simplified, the necessary alignment that this required was a special skill, and the names of the craftsmen expert in the justification of matrices were remembered along with those of the artists, the punch-cutters. The problem that faced Gutenberg was ten times greater, and the even, regular spacing of the letters in the forty-two-line Bible is testimony of his success in solving it. To achieve this he used multiple forms of some letters, kerned (protruding from the body) or not, depending on the abutment with the following character, and multiple letters with abbreviation forms—all this as well as justifying matrices to the highest standard. No doubt the letter forms were drawn and redrawn, the punches cut, rejected, and replaced. No wonder it took a long time. No wonder, too, that the earliest letters they devised, the Bible types and the bastardas used for the early indulgences, were even to a contemporary eye unusual and in their way perfect. Gutenberg wanted letters which would stand the test of time; he chose designs which had already lasted well. This "backward



The opening page of the Giant Bible of Mainz (Mainz, 1452-1453), a manuscript Bible on vellum. LC-USP6-2194-A

look" was to become "a recurring theme in the history of printers' letters."¹⁰

I should add here that I share George Painter's view (expressed in his brilliant and to me convincing proof that Gutenberg was the printer of the thirty-six-line Bible) of the "Helmasperger Instrument," a document of November 1455 recording the outcome of a suit brought by Gutenberg's financial partner Johann Fust for the repayment of two loans of 800 guilders each with interest. Painter suggests that this "like many other medieval and some modern legal documents, should be regarded not as a verdict subsequently executed but rather as a procedural cover for a private agreement."¹¹ I might add that since the quarrel, if any, was about interest,

it may have been a put-up job to avoid the sin of usury. I believe in fact that a division between Gutenberg and Fust, based on investment and assets, was always foreseen, or at least from the point where Fust made his second loan, and was then advanced from investor to participant; I believe that this explains the creation of types in duplicate (why else were there two textual types for the forty-two- and thirty-six-line Bibles, and two bastardas for the thirty-one- and thirty-line Indulgences?); and I believe that Peter Schoeffer, an expert calligrapher, was introduced into the partnership (at some point after 1449, when he was in Paris) as Fust's nominee to learn punch-cutting and type-founding (a trade which Schoeffer and his son practiced until 1544). All this would explain the duality of the earliest surviving examples of printing. If Gutenberg seems to have concentrated more on ephemera (assuming that the thirty-six-line Bible was a special commission from Bamberg), while Fust and Schoeffer produced more books (such as the magnificent color-printed Psalters of 1457 and 1459), this may reflect the relative capital at their disposal (this division is explicit in the Helmasperger Instrument).

I am sorry to have spent so long on the invention, but it is crucial to know what it was—to see it both as the natural expression of the forces that created it and as controlling its subsequent exploitation. Once the adjustable mold was invented, its construction could be entrusted to a competent artificer. The art of cutting letter-punches, which took so long to master, remained a rare gift: future research will reveal that, far from each printer being his own punch-cutter, there were never more than a few artists capable of it in any generation. Their skill determined the ultimate supply of types, although their commissions came from printers or their backers. For them, as for the punch-cutters, written letters remained the model.

As Curt Bühler has shown with admirable thoroughness in *The Fifteenth-Century Book*, the work of the early printers was deeply interpenetrated by the crafts already involved in book production. Fust and Schoeffer's *Canon Missae* (1458) was printed to insert in manuscript service books. Law books printed in Bologna conformed to the layout demanded by the *pecia* system by which manuscripts of the same books were earlier produced. Scribes became printers, like Schoeffer,

Colard Mansion, and Vêrard; others, like Steffen Arndes at Lübeck, were simultaneously scribes and printers; others again, like Johann Schüssler and Bartholomaeus Kistler, began as printers and later became scribes. Illuminators decorated printed books, and printers, in making their own woodcut decorations, copied the work of scribes. This last activity was responsible for one of the rare (so far as we know) demarcation disputes between the old and the new trades. Günther Zainer copied the borders made by the scribe Heinrich Molitor, and it was against Zainer and Schüssler that the Augsburg guild of engravers, illuminators, and card-painters complained in 1473. Yet there again, scribes copied printed books and illuminators' woodcuts; printed illustrations are even found inserted in manuscripts. But the illuminator's work was dying by the end of the fifteenth century. The scribe's lived on; books with a limited circulation were still divulged in manuscript until the eighteenth century, and (as Bühler says) their work was only killed in the end by the typewriter.

Much can be learned about the nature of the revolution that printing brought from the *métiers* from which the only printers came. Two, Berthold Ruppel and Heinrich Kefer, were Gutenberg's apprentices and bred to the craft. Others, like Schoeffer, were scribes. There were metal workers, dealers in manuscript books and paper, clerks (like Pfister), priests, notaries, and masters of arts. Eggestein at Strassburg was *sigillifer curiae praepositurae*; Roritzer was clerk of the works at Regensburg Cathedral; and there was Regiomontanus the astronomer. Germans like these took the invention abroad. Neumeister, who may have learned from Gutenberg in 1459–60, went from Mainz to Foligno, back to Mainz, then took the road to Toulouse and Spain, stopping at Albi. Finally he went to Lyons, where he died. Native printers in other countries tended to be slightly different. Lignamine at Rome, Azzoguidi at Bologna, the fifteen-year-old Ercole Bottrigari, also at Bologna, were noble; Porro at Turin, like Gutenberg and Nicolas Jenson, was connected with the mint; Cennini at Florence was a sculptor and goldsmith; Aldus Manutius at Venice was a scholar. In France, Parisian printers were academics or *libraires jurés* by appointment to the university, while at Lyons the emphasis was, as in Germany, professional and clerical. In England, Caxton apart, the first generation of printers were

all foreigners who trained the second generation of natives.

It is very difficult to work out the economics of printing in the fifteenth century. The costs of equipment and wages are recorded in a few instances, but the figures vary considerably. In general, however, they seem to show that Fust's investment in Gutenberg was not, as has been supposed, an exceptionally large sum. It is also clear that the cost of paper was the dominant element in the costs of printing books. It was sometimes paid for and supplied by someone other than the printer, who may have been unable to find the necessary funds himself. An obvious example is the Bartholomaeus Anglicus, printed for Caxton at Cologne in 1472 by Johann Veldener. It is a substantial folio, standing out both in size and length from Veldener's other productions. No doubt, in making the arrangements to secure Veldener's services, Caxton used his capital resources as a wealthy merchant to pay for paper. It became increasingly common to share this risk. Thus we find two printers employed to print one book no later than 1477, and copies of the same book with two different "publisher's" imprints in 1480.¹² Besides this, patronage, in its widest sense, from the remuneration of authors to the establishment of presses in small places or monasteries, underlies the progress of the first printers. Only by the 1490s did the big printing house of Koberger, Amerbach, and Quentell achieve a large enough (and international) trade to generate their own capital.

It is a matter for argument how far extant sources of manuscripts satisfied demand before the invention. Though books were few, their loss sometimes an irreparable calamity, it is probably true that those with means could purchase the books they wanted, if at very fluctuating prices. It must be remembered that before the invention, the market for books was mostly a secondhand trade. The printing press created the concept of the "new book." So it is not surprising that early prices for printed books also fluctuated, but there must be some truth in Cardinal Bussi's assertion in 1468 that printing had reduced book prices by 80 percent. By the end of the century, prices became more stable: in Basel, a guilder would buy 400-450 folio leaves. Printing numbers equally fluctuated. Sweynheym and Pannartz seem regularly to have printed 275 copies of their books between 1465 and 1471,

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From *Regimen sanitatis* (Augsburg: Anton Sorg, 1490).

but by the 1490s impressions of over 3,000 are recorded. Early long runs include 1,000 of the *Decretales* by Gregory IX (1471), and 1,025 each for the Italian Pliny (Venice, 1476) and Ficino's Plato (Ripoli, 1483). It is probable, however, that these were exceptional, and while the handpress lasted, impressions of some hundreds were common.

The earliest printed books reflect the resources and background of the printers and, above all, the markets open to them. These have been aptly categorized by Goldschmidt in seven main groups: universities; the clergy; monasteries and convents; the "civil service" (those in administrative positions in the service of princes, prelates, or city-republics); the feudal nobility (especially their ladies); law-

Book of Hours, a piece of propaganda, or an educational book. Other printers, neither as shrewd nor as wealthy as Caxton, were forced to travel to seek such commissions. Those who settled, like Caxton, chose places where they could rely on patronage, individual or general—large towns on trade routes like Venice, Basel, or Lyons; university towns, Paris or Bologna; or any small place, Subiaco, St. Albans, Albi, or Esslingen and Urach, two small staging posts in the wandering life of Conrad Fyner, where a prince, a bishop, an abbey, or a wealthy man could provide the means to earn a livelihood.

On December 5, 1489, Baptista da Guarino, son of the great scholar, wrote to Pico della Mirandola that he would prefer to buy print books rather than manuscripts, since they offered a more reliable text. Pico's library consisted mostly of printed books. The press had already made great progress since Vespasiano da Bisticci recorded thankfully that there was not one printed book in the library of his patron, Federigo da Montefeltro. The earliest printed books were no better than the often bad manuscripts from which they were printed, but multiplication made for comparison, and comparison brought correction. The position gained by printing now steadily improved.

The sixteenth century opened a new era of economic expansion, of new discovery overseas, new learning, and an almost Virgilian new hope in the young rulers of Europe. The new art of printing was an all-pervading element in the new age, which it seemed at the time to typify, for good and ill. Pandora's box was now open, the dragon's teeth sown (both analogies that struck contemporaries as they contemplated the progress of the press). What followed? In Wehmer's words:

The printing press effected a development by which the written word was much less tied to place and time. Technology and commercial incentive resulted in books produced in large quantity, much cheaper, and as an article available everywhere. It was in the interest of the producer to sell the largest possible number to the widest circle of consumers. With it the contact between reader and producer became more remote.¹⁴

Some of the results of this were purely mechanical. First, foliation and then page-numbering became universal in printed books. Both are found earlier in manuscript books, but since no two manuscripts were necessarily the same, citations of the text involved cumbersome repetition of book and



From the *Catholicicon* by Johannes Balbus (Mainz: Johann Gutenberg? 1460).

chapter by number and usually by title (since numbers were apt to change from manuscript to manuscript). The press reduced that to a simple page number, and this in turn made an even more useful adjunct possible, the alphabetical index. The numerous abbreviations, which saved time and materials for the scribe but wasted the compositor's and reader's time, gradually disappeared. The size of books dwindled from the heavy folios common at the beginning to a more usual quarto. Octavos were not unknown, although it was left to Aldus Manutius in 1501 to make a virtue of small size.

It is easy, but too simple, to suppose that the ultimate dominance of roman and italic type followed a similarly logical progress. But the early printers realized—and modern research has not added sig-

nificantly to their understanding—that legibility is based on familiarity. Gutenberg, as we have seen, went to great pains to reproduce the *best* manuscript hands, and his example was followed by later printers. At first, the roman types, the “*litera antiqua*” used by Jenson and other early printers in Italy (and also France and Germany—“*ne Italo cedere videamur*,” as Günther Zainer in Italianate Augsburg put it at the end of one of his books in 1472) seemed likely to predominate. But it was not the letter which lawyers and clerics were used to seeing in their texts. They were a more reliable market, printers found: in 1472 Vindelinus de Spira used the first “*litera moderna*” or *rotunda* type, which was quickly imitated first in Germany and then in France and became the standard type for theological, legal, and technical books. Bartholomew of Cremona in 1473 and Jenson in 1474 gave it the final form in which it survived for another century.

In the late 1480s and 1490s, the *textura*, or black letter, was perfected in Paris. It had an even longer life—until the eighteenth century in England (for legal and some liturgical work) and longer in Germany, the Low Countries, and Scandinavia. That roman and italic have proved to have an even longer life yet is due to a combination of three factors. The first was a punch-cutter of genius, Francesco Griffo, whose types attained, in the hands of Aldus Manutius, a typographic beauty hitherto unequalled. Secondly, when François I deliberately chose Italian models in literature, architecture, and the arts for his French “*renaissance*,” printers followed suit. Griffo’s types were copied by the great French printers Simon de Colines and Robert Estienne when, about 1530, the typographic primacy passed from Italy to France. Lastly, these printers and their successors identified themselves not only with the revival of learning but with the reform of the Church. In Calvin’s Geneva, Robert and his son Henri Estienne’s typography, exclusively roman and italic, was canonized; the Geneva Bible in 1560 extended it to the English-speaking world.

In France and elsewhere, the extension of literacy gave a new impetus to the vernacular languages of Europe. A new intellectual interest in their philology, new nationalisms, as well as a plain desire, evangelistic or commercial, to provide for those without Latin, all took part in this. Over three-quarters of the books printed by 1500 were in Latin, but before

the century was out, this proportion was changing. The comparison of texts brought a new critical method into learning, which, especially in the sciences and medicine, owed its growth to the press. The structure it provided has been compared with the rediscovery of the geometry of perspective in the visual arts, a neat parallel, although there is nothing to connect the two phenomena. Increasingly, this new scientific approach was expressed not in learned Latin but in the vernacular. With this opening out of learning, the old concept of arcane studies, of knowledge as restricted to the initiate, began to die. No doubt, the invention was welcomed by the speculative. By Hermetic tradition, mechanics and machines were a form of magic; printing was a form of mechanics, and its gift of multiplying the written word a kind of alchemy. If there was a conflict between restricting such high matters to a narrow circle of *illuminati* and extending them to a wider circle of the sympathetic, thereby perhaps extending knowledge itself, then vulgarization won. Astrology, alchemy, cabalistic and hieroglyphic writings, and other mysteries poured from the press, and, like the earlier medieval works similarly made current, were discredited or made obsolete by this exposure. The emblem book, a new form of mystic expression to which print and printed pictures were essential, mirrored this passing cloud and then itself died.

The speed of intellectual advance was enormously increased by printing. One instance is enough. In twenty years, between 1495 and 1515, Aldus, aided by the influx of Greek exiles from the collapse of the Byzantine empire, published the greater part of Greek literature. Earlier, it had taken over a century to do the same for Latin, without the press. It is a measure, too, of its importance that the center for this recovery was no longer the Church council or the university, but a printing shop: Aldus’s household was his academy. Amerbach and Froben left a similar mark on patristic and biblical studies. Even now, every invention, every new idea, whatever its medium, has eventually to be “registered in print”: fixing what has been fluid or undefined is still the major function of the press.

But perhaps our last thought should be for the

From Astronomica by Julius Firmicus Maternus. Printed in Venice by Aldus Manutius in 1499.

IVLII FIRMICI MATERNI IVNIORIS SICVLII
V.C. MATHESEOS LIBER PRIMVS AD MA-
VORTIVM LOLLIANVM. PRAEFATIO.

LIM TIBI HOS LIBELLOS, MA-
uorti, decus nostrū me editurum esse pro-
miseram, uerum sapius incōstantia uere-
cundia retardauit, & ab isto scribendi stu-
dio, dubia trepidatiōe reuocauit, cū prae-
fertim fragilitas ingenii mei, nihil se scire
tale posse conciperet, quod dignum fore
tuis auribus iudicaret. Cū enim audacu-
lam nimis, & supra uires meas, pollicita-
tiōem illam recorderer, qua tibi omnem

diuinæ Matheleos disciplinam dicaturum me esse sponponderā, hæsitan-
tem sapius animum, hinc pallor, hinc rusticus quidam timor inuadebat.
Nam cum esses in Campaniæ prouinciæ fascibus cōstitutus, cuius te ad-
ministrationis merito, maxima honoris dignitate nobilitas, occurreretq;
tibi rigor hyemalium pruinarum, qui te à rebus agendis femotum, ac pro-
lixum laborum itineris diuersitate cōfectum, & animum simul, & membra,
aliquantisper relaxare suaderet, ad me primum, in has oras siculas, ad ea
potissimum studia, quibus ab ineunte ætate, uterq; nostrū deuinctu erat,
suauissime diuertisti. Vbi & languentis, & fatigati corporis mei senium eni-
xuses fidis, & religiosissimis amicitia releuare fomentis. Cum autem ad
pristinum me statum solatiis, ac medelitis tuis, fanitas restituta reuocasset,
recolentes inuicem pristinos actus, & leuioris ætatis illecebras, ad memo-
riam reuocantes, honestas, & uarias sermonum fabulas inuicem cōfereba-
mus. Sed posteaq; de actibus, & processibus nostris, cōfabulati sumus, scru-
tatus à me es (sicut meministi) totius Sicilia, quā icolo, sitū, & unde oriū-
dus sum, & omnia, quæ ueteres fabulæ prodiderunt, cū ueræ rationis ex-
plicatione quæfisti. Quid uelit ex se Scylla, quidue charybdis, quid cōcur-
rentium in freta fluctuum turbulenta confusio, quos disiecta, ac separa-
ta maria, certo horarum tempore, ac spatio, contraria undarum collisiōe
coniungunt, quid faciant ignes, qui ex Aetnæ uertice erumpunt, quæ na-
tura eorum, quæue substātia, ex qua origine, sine iactura montis, tanta p-
ficiscantur, & anhelent incendia, qualis sit lacus, qui prope alueum Sime-
thi amnis ostenditur, cui Paliscus nomen est, qui semper crassitudine lu-
rida fordidus, liuentibus spumis obatrescit, & strepente cōiugio stridulus,
argutum murmur exsibilat. Cætera etiam omnia mecum recolens, & re-

capacity for change released by the invention. The printer, at once a workman and literate, typified social change. The learned artificer was but one of a series of disruptive mutations in society; the foundation of academies, the new prestige of artists, engineers, and navigators, the definition of professions, and the establishment of the new standards for them—all these changes came about in consequence. A new class of person, the autodidact, came into being. The extension of the known world, in particular the retention of a discovery once made (unlike that of the Norsemen in America), was vastly facilitated by the press as a means of recording and spreading knowledge. But perhaps the greatest change of all was the simplest: the new

bond between man and woman of a common literacy. In the *Versuehung des Leibes* of Heinrich Lauffenberg, printed at Augsburg in 1491, the advantages of reading are urged on the medieval figure of Everyman:

Und wüsste ein jeglicher Mann,
Was guter Lehre darinnen stand,
Mann und Weib würden es lesen,
Kein Haus sollt ohn dies Büchlein wesen.¹⁵

"Did everyman know, / what good knowledge lies therein, / man and woman would read it, / no house should be without this little book." No other invention can claim such an all-pervasive influence as printing has exerted in the five hundred years of its existence.

NOTES

¹ Robert S. Lopez, "The Trade of Medieval Europe: The South," in *The Cambridge Economic History of Europe*, vol. 2, ed. M. M. Postan and E. E. Rich (Cambridge: 1952), p. 346.

² Denys Hay, *Europe in the Fourteenth and Fifteenth Centuries*, A General History of Europe (New York: Holt, Rinehart and Winston, 1966), p. 348.

³ Elizabeth L. Eisenstein, "The Advent of Printing and the Problem of the Renaissance," *Past and Present* 45 (November 1969): 19–89.

⁴ *Ibid.*, p. 5.

⁵ Curt Bühler, *The Fifteenth-Century Book: The Scribes, the Printers, the Decorators* (Philadelphia: University of Pennsylvania Press, 1960), p. 35.

⁶ Hay, *Europe*, p. 338.

⁷ Lucien Febvre and Henri-Jean Martin, *L'Apparition du livre* (Paris: A. Michel, 1971), p. 49.

⁸ Victor Scholderer, *Johann Gutenberg, the Inventor of Printing* (London: Trustees of the British Museum, 1963), p. 12.

⁹ *Ibid.*

¹⁰ Harry Carter, *A View of Early Typography up to about 1600* (Oxford: Clarendon Press, 1969), p. 31.

¹¹ George D. Painter, "Gutenberg and the B 36 Group: A Re-Consideration," in *Essays in Honour of Victor Scholderer*, ed. Dennis E. Rhodes (Mainz: Karl Pressler, 1970), p. 315.

¹² Rudolf Hirsch, *Printing, Selling, and Reading, 1450–1550* (Wiesbaden: Otto Harrassowitz, 1967), p. 56.

¹³ Ernst Philip Goldschmidt, *Medieval Texts and Their First Appearance in Print* (London: Printed for the Bibliographical Society at the University Press, Oxford, 1943), pp. 14–15.

¹⁴ Carl Wehmer, "Ne Italo cedere videamur," in *Augusta 955–1955*, ed. Hermann Rinn (Augsburg: Hermann Rinn, 1955), p. 155. Translation in Hirsch, *Printing, Selling, and Reading*, p. 65.

¹⁵ Hirsch, *Printing, Selling, and Reading*, p. 150.

THE EARLY ILLUSTRATED BOOK

Highlights from a Lecture

by Philip Hofer

Although one or two illustrated type-printed Western books suddenly appeared just after the middle of the fifteenth century in Germany—one of the “revolutions within a revolution” referred to by Nicholas Barker—illustrated books did not begin to proliferate in Europe until 1472, and then only in Germany and Italy, the heart of the Continent. The first issue of the German *Apocalypse* block book can be fairly closely dated, from its paper, as about 1451. Block books printed from one relief-cut woodblock to a page, with text and woodcut together, soon lost out, however, to the superior technical advantages of books printed from movable type which could be corrected, if necessary, far more easily. Illustrated books printed from movable type—the real technical revolution—began with Ulrich Boner's *Der Edelstein*, issued at Bamberg in 1461. Superior techniques for making engravings, etchings, and woodcuts for illustration were soon being invented in Germany and the Netherlands. Illuminated manuscripts, produced slowly one at a time, had long since become too expensive for scholars and less wealthy individuals to buy. Private libraries were small and public libraries did not really exist.

To be sure, there were single European prints sold as early as 1423 (one so dated is in the John Rylands Library at Manchester, England) and

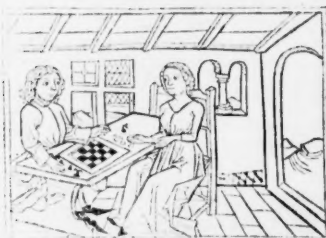
probably before. Paper had arrived in Europe by the twelfth century from the Far East, where printing, paper, and illustration had existed as early as the Buddhist Diamond Sutra, dated A.D. 868, in the British Museum. The invention of the various printing techniques in Europe was a separate development over five hundred years later, but once the idea of illustrated printed books took hold in the West, about 1472, the spread was very rapid. The price and time advantages were enormous and a demand was present.

Early examples of type-printed books were hand-illuminated simulated manuscripts on vellum, but it was scarcely twenty years before inexpensively printed books on paper all but completely superseded such anachronisms. Early type printers usually made little effort to secure the opulent effects of simulated manuscripts, which must have cost nearly as much as their prototypes, but rather adapted ideas from manuscripts and invented new ones of their own.

Philip Hofer, one of the country's leading book collectors, is the founder and curator emeritus of the Department of Printing and Graphic Arts at Harvard University. He received an honorary doctorate from Harvard in 1967. The lecture upon which this article is based was the second in the Engelhard series of lectures on the book and was presented at the Library of Congress on May 20, 1977.

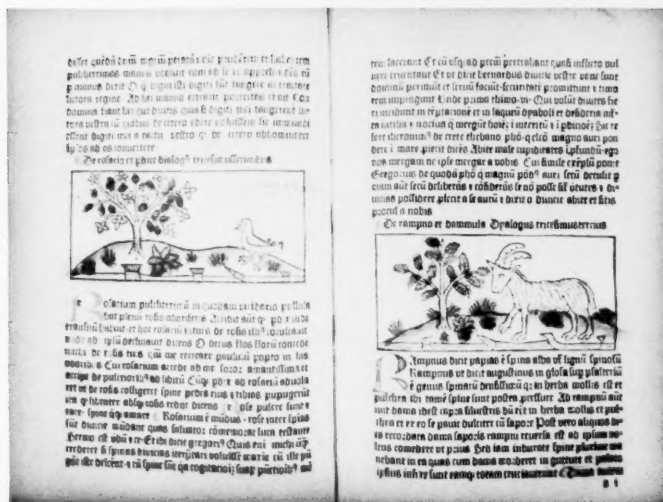
Das Goldene Spiel, dated 1472, was the fourth illustrated book printed by Günther Zainer of Augsburg and the first book based on a popular amusement, in this case chess. Meister Ingolt's work was successful but a novelty, for Frederick Goff suggests that it is now very rare. The woodcuts in the copy illustrated here are not hand colored as early German woodcut books usually were.

Die hebt sich das buch an das man nent dz guld in
spil vnter dem begiffen sand siten spil durch welche
die houbtstund der buch an der guld siten seindt hant
vñ moßteich zu bekräftung d' errenten erleiht werdt



Ich he maner harschaft vñ an buche-
ge vñ an sel watter vñ marthe da by
wie dz se so gu zu guden siten gemeist wand
die se von gut herten vñ von uren elten
het bracht als ich wol han gemercht vñ gyt vil pe-
dig herten vñ die an tunde vñ schreien also se vñ me
manig predig geschriben habent da han ich gedachte
dz ich got dē obersten herten vñ d' ewlen hochgebome
müter maria vñ den heiligen zu eren vñ meiner ge-
nädigen harschaft zu einē geselichen dienste vñ allen
den die es lesen zu ciner manig zu tugten dz ich will
machen ein buchlin dz ich nennen will dz guld in spil
vñ dz will ich reiten in siten spil wñ die siten houbt-
stund vñ dz sint siten gulden spil schaffzettel wñ
hoffart boespiel mit ten schabladen wñt krasche

Among the early illustrations done by artists who are unknown to us today is a famous early Dutch woodcut book first printed in Gouda in 1480, the *Dialogus creaturarum*. Both the author and the artist are truly anonymous, but the simple, amusing woodcuts are a delight in their appropriate coloring. Eight different editions of it were made.

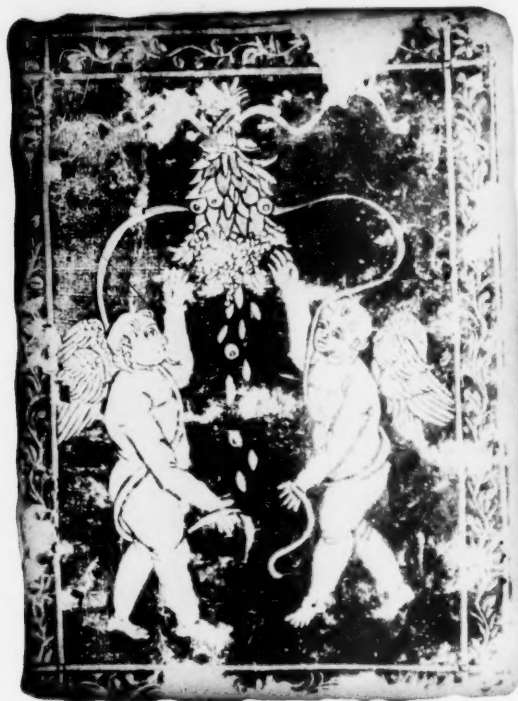


E pertuo inganni molti ne perisse.
 Che fu mia madre menti a la fauella.
 Ma de esser lupo le pariete fuisse
 Te monitran e non mia matre ne caprilla.
 Perfetta e la dotrina de parenti
 E ch'ia sprezza ne riman dolenti.

SONETTO MORALE.

Sei uen a te o amico o uer parente
 El qual te diu perfetto consighio
 Amico mio dalli tosto depiglio
 E fermo tienlo stretto ne la mente.
 Se si te bisogna subitanamente
 Usa con esso come el padre el figlio.
 Lieto te trouera con chiaro ciglio.
 El tuo inimico rimara dolente.
 Come obedi el capretto a la sua madre
 Così obedi debiamo a la fe nostra
 Ne li comandamenti de dio padre.
 Guardati dal nemico che ti mostra
 Si come el lupo parole bugiadie
 Sol per condarti a la infernale giostra

Hor dunque fugi sua giostra uolente:
 Che le anime con lui stan mal contente.



The artistically satisfying woodcuts of the Verona Aesop of 1479 are also by an unknown artist. The pages illustrated are from the only recorded copy of the book that is printed on vellum, a copy which is slightly incomplete, however. There are good reasons to use vellum in printing, costly as it is. Firstly, there is its strength and permanency; secondly, the contrast between the black shiny ink and the white vellum page is brilliant. This is the first book to contain borders made up of type ornament. Aesop's *Fables* has been over the centuries one of the most popular of all books, for it is packed with wisdom told in an amusing and often unforgettable way.

Present in Italy in the fifteenth century, book jackets and pictorial covers are not a modern invention. This Ferrarese book cover on paper boards, of about 1495, has a different pattern on each cover but no lettering. The purpose of the book jacket must have been, however, the same as it is today: to attract attention. The book is exceedingly rare. The text by Riccias is of little consequence.



Some artists who did early book illustrations are far from unknown. Great artists have been closely involved with book illustration at all periods—not just in recent times when the School of Paris invented the “livres des peintres.” The reputation of book illustration as a minor art is a very undeserved one which is rapidly being dissipated. There are more original prints by artists, greater and lesser, as illustrations in books than exist separately.

One of the greatest illustrated books of the fifteenth century, because of the mastery with which the woodcuts were designed and executed by the artist himself, is Albrecht Dürer's *Apocalypse* of 1498. Printed and published by Dürer, the many copies that probably once existed may very well have been broken up so that the woodcuts could be framed separately. The title is very decorative calligraphic woodcut in the Latin edition; a German edition is even rarer. Both are of the same year. (See facing page.)

French books were not customarily illustrated with pictures as early as those of Germany, the Low Countries, or Italy. Indeed, the leaf from Valerius Maximus's *Facta et dicta* (1476) reproduced on the cover of this journal is treated like an illuminated manuscript except for the fact that the text is printed from movable type. The rest of the page is all by hand—probably two or three hands, as there was early in the history of printing a division of labor in the making of books. The watercolorist made the pictures, another artist the large initial with its decorations, and the other colored letters were done by a rubricator. From 1481 on, scores of fine French illustrated books were printed in Paris and Lyons, including the many famous small Books of Hours, private devotions illustrated with metal relief plates.

In Italy early books are more rarely found colored than in Germany, but superior Italian coloring and bookmaking are very fine. The Venetians became masters of trade and professional books, such as Johannes de Ketham's *Fasciculus di medicina*, printed in Venice in 1493, a medical treatise and one of the first woodcut books to be colored by stencils. Venetians were great printers of religious texts as well, and, indeed, Venice was the most productive city in Europe at the end of the fifteenth century. The Florentines, on the other hand, were less



prolific but more artistic in their presentation.

A small booklet, measuring 7½ by 5½ inches, the *Canzone per andare in maschera* was possibly written by Lorenzo de' Medici around 1500. It has a title page bearing a lovely woodcut, illustrated here, showing how Florentine gentlemen persuaded their ladies to go with them to a masked ball. The men hold up what appear to be doughnuts as a temptation. This book has sometimes been assigned to the school of Ghirlandajo. (See above.)

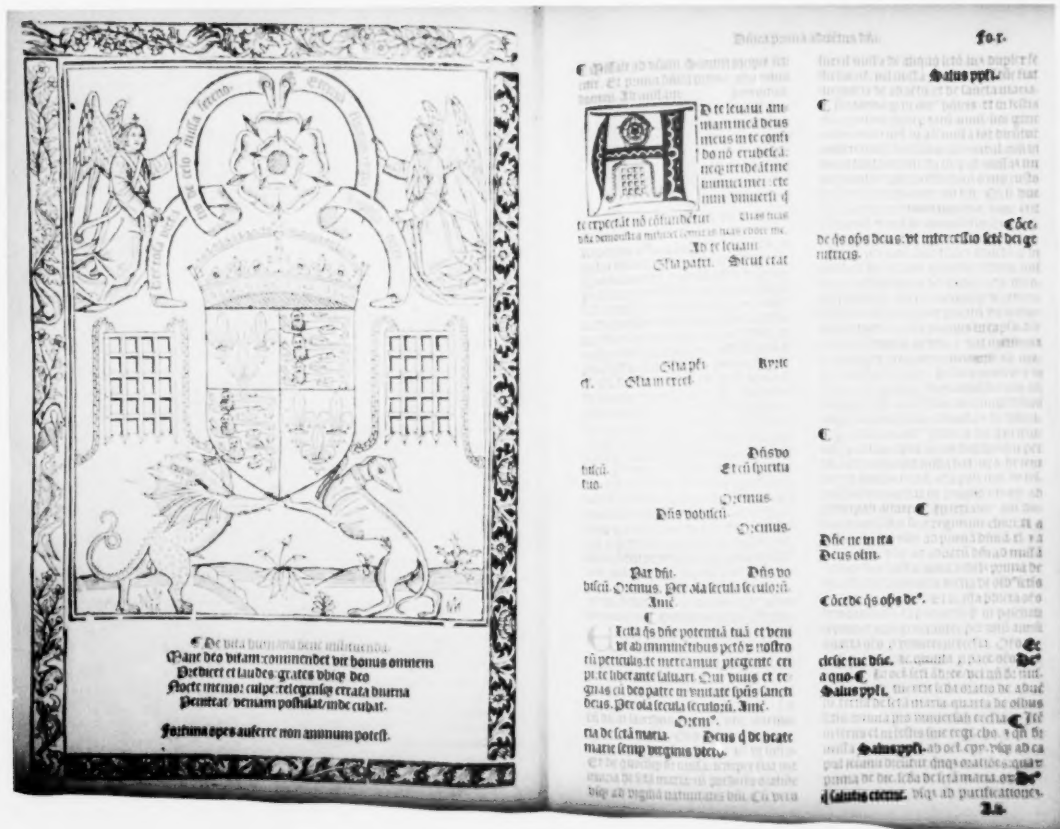
Florence also produced the first book on commercial arithmetic, in 1491, with dozens of simple but elegant tiny woodcuts. Altogether, the Florentine illustrated books of the 1490s are probably the loveliest of all that decade, with a strong accent of black on white which serves to give a sense of color without its actual use. Slowly we may be able to find the names of the designers, if not the cutters, of these illustrations.



Spanish and Portuguese incunabula are generally larger, more classic, and more severe than German, French, or Italian; but they are nevertheless very ornamental, because of their gorgeous title pages, like the portals of their great cathedrals. The first Iberian illustrated book was *Los Trabajos de Hercules* by Enrique de Aragón, marqués de Villena, printed at Zamora in 1483, which has fascinating but inferior cuts.

An example of the eastern and northern European illustrated books of the fifteenth century, few of which have artistic merit, is the quarto Psalter printed at Cetinje, the capital of the erstwhile small state of Montenegro, now part of Yugoslavia, of which only two copies are recorded. Probably the few relief cuts and many ornamental capitals are from metal rather than wood. Their style is more Slavic than Venetian, although the Dalmatian Coast, where Cetinje is located, was dominated by Venice in 1495. The book was printed by two enterprising Slavs, who give their names as Hieronymus Makarye of Crne Gori and Gjurgja of Crnojevica. (See illustration.)

In England there were no really worthy illustrated books printed in the fifteenth century—not even the well known Caxton Chaucer, which is, nonetheless, one of the most valuable books of the century because of its text.



A fine English book of the early sixteenth century is a large Missal for use at Salisbury, printed by Richard Pynson in London in 1520. The book is printed on vellum and has a limited number of fine illustrations like the one shown here, which is strongly French in style. It is likely that the artist was French, for the Missal is finer than any other English church book done before 1535.

The spread of the illustrated book after its beginnings in western Europe was very rapid and its influence exceedingly important, once started. The growth of universities and increasing literacy caused an unexpectedly heavy demand for books. Illustration greatly widened the comprehension of the text for those who read slowly; in fact, pictures plus text gave the book two dimensions, each supplementing the other. Illustrations even attracted attention from the nobles and royalty, who were not always the more literate segment of the population. The invention of printing and the making of prints and illustrations were the most important developments of the years 1450 to 1500, the so-called incunabula period.

Books reached eastern Europe before 1500. A few years later they had reached Turkey, where a few charmingly decorated books appeared, printed in Hebrew by Jews who had been expelled from Spain and Portugal in 1492. The decorations derived mainly from Naples, then a Spanish possession, as did the gifted individualistic designers who produced the glorious, but anonymous, woodcut borders in Moses ben Nahman's *Perush Ha-Tora*, dated 1490.

There was no Western printing or illustration in Russia before 1563. The first printed work did not appear in the Western Hemisphere until 1539 in Mexico; and printing later spread from there into South America. In North America there was no printing until the seventeenth century. The Portuguese voyages around the Cape of Good Hope, however, brought Western printing to Goa, India, in 1557, Macao, China, in 1588, and Nagasaki, Japan, in 1590.

Until the 1520s, northern European illustration was Gothic in style; southern European, notably Italian, was Renaissance, and Spain and Portugal wavered between the two.

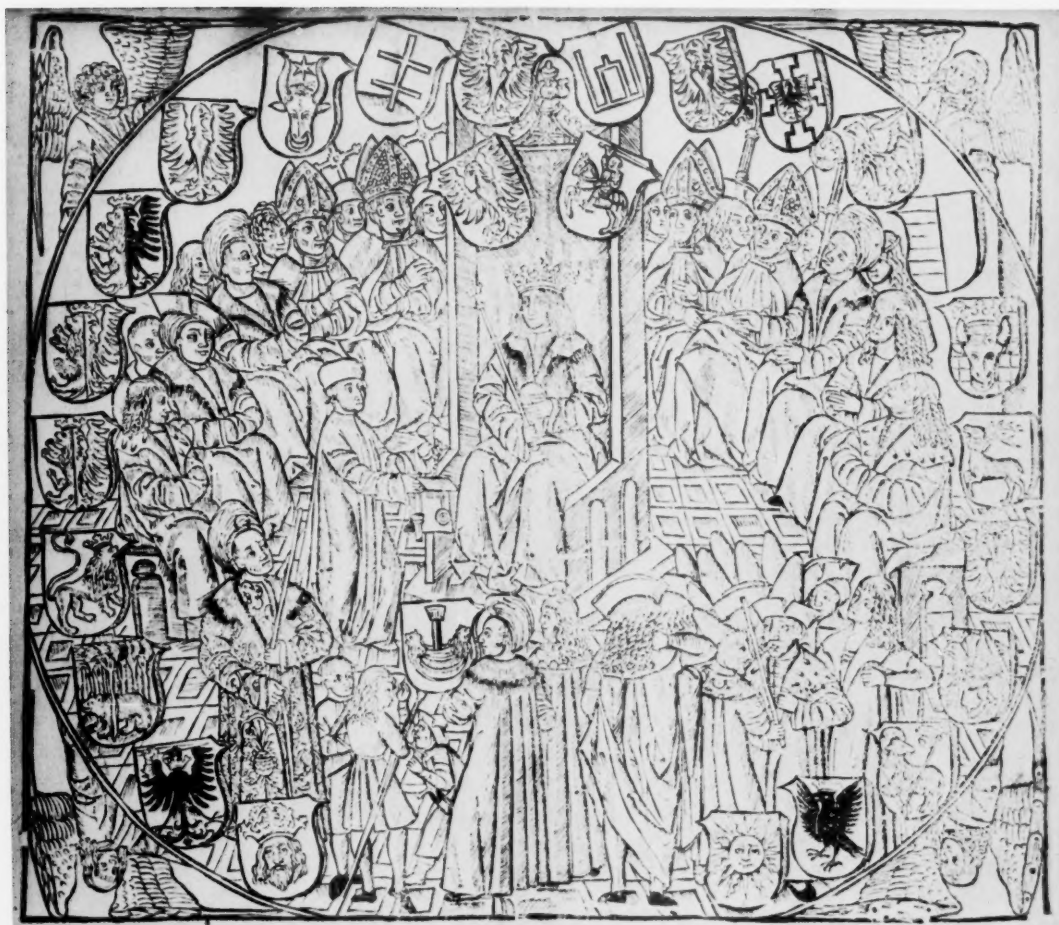
As the decades of the sixteenth century passed, more and more secular books were demanded to explain the rapidly increasing exploration and innovations in life-style everywhere. Books became on the average much smaller in size than the folio—some were even small enough to put in a pocket. New subjects were sought, even seemingly frivolous subjects such as emblems. Books of emblems were not considered frivolous at the time they were published, however, since they contained hidden political, social, and religious meanings in their texts and pictures.



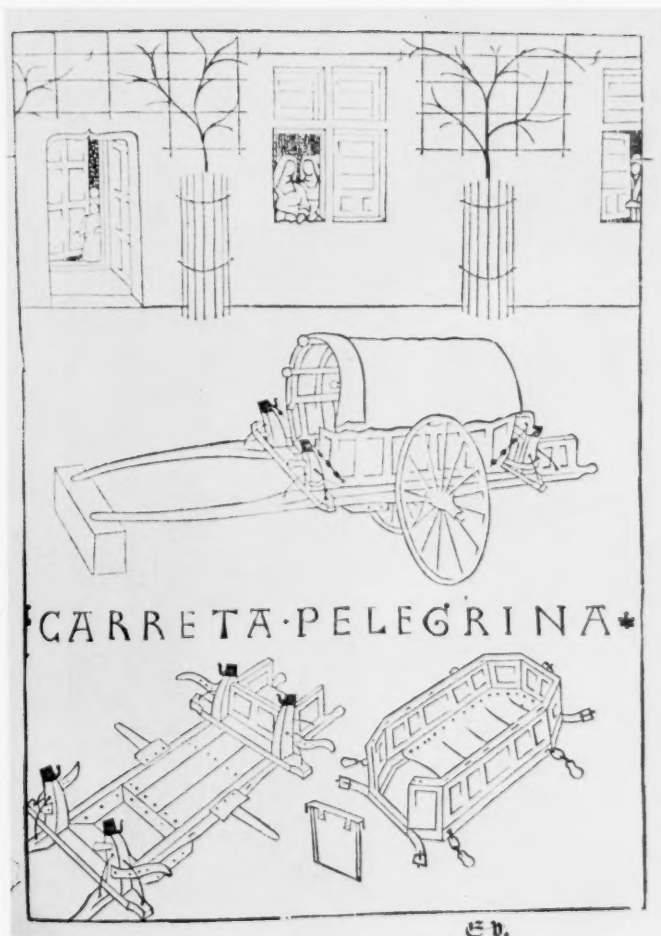
¶ Portailite

O miserables obfinez meschans
Qui tât auz ayne vostre charogne
Quât sur terre pourez aser marchés
D'icte moy cy omët vostre besoigne
Et se porte nul de vous point ne grongne
D'aintenant, bien vous ay contentez
L'ay jay vos corps en mea charniers gectez
Qui font les granges et garniers de la mort
Du vous seyez par les vres tormentes
Et redigez en spens vile et out

Although superficially religious, Robert Gobin's work *Les Loups ravissants*, published in Paris about 1503, is anticlerical. It was printed for Antoine Vérard, the largest French publisher at the turn of the century. The small volume has a most amazingly vigorous set of anonymous woodcuts, like no other of its period. It is essentially a dance of death, rather abstract in cutting, almost modern, powerful, and excessively rare. The artist may have actually cut directly on the woodblocks. He was not a great technician, but his draftsmanship is dynamic. (See above.)



This large folding woodcut is the frontispiece to the earliest compendium of Polish law, printed in Cracow in 1506, and shows King Sigismund I, who had just ascended the throne, surrounded by some of his principal nobles and clergy. In the law folio, printed in the Polish language and for the first time, is the poem "Boga Rodzica," which was the country's national anthem in the sixteenth century.



De artificiali perspectiva

By the 1540s England was beginning to produce some good illustrated books. The presence in London of Hans Holbein, as king's painter to Henry VIII from 1538 until 1543, when he died, had a real influence in this movement.

Italy and France were where most of the more important illustrated books of the sixteenth century were made. Luca Paccioli did the first series of large roman letters to suggest their proper mathematical proportions in Venice in 1509, with some assistance from his friend Leonardo da Vinci, who was also very influential in a folio Vitruvius printed at Como in 1521. Ideas and knowledge had become by then rapidly interchangeable, not only from city to city but among countries remote from one another.

While Paccioli was working on the first alphabet in perspective, a canon of the Cathedral of Toul, near the Franco-Italian border, preceded it by his own general study of perspective, doing amazingly simplified renderings of everyday scenes in a small French city. This excessively rare book, *De artificiali perspectiva* by Jean Pèlerin, printed in 1505 at Toul, may appear Renaissance in style because of the simple classical elements, but it is actually still Gothic, as books were then in Germany, the Low Countries, and Switzerland.



In Italy the High Renaissance began early and Italian books of the 1520s were more elaborate than elsewhere. A sixteenth-century Italian illustrated book by one of the greatest artists of the century is the Aretino published in Venice in 1537 and illustrated by Titian. It is printed in *chiaroscuro*, a color-shaded block being superimposed on the basic black-and-white outlines of the first woodblock. Chiaroscuro became high fashion and sometimes gave the effect of drawings to the prints. The joint publication of two celebrated friends—Titian, the leading Venetian painter, and Francesco Marcolini, one of the best Venetian printers—*Stanze* honors their rather notorious friend Pietro Aretino, whose influence obtained valuable commissions. In a way, the illustration is a bit of a joke: Aretino is seated on the shore, gazing adoringly at a Siren in the sky. As one Angela Serena was Aretino's current mistress, the vision suggests a play upon words, without mentioning her name. The verses are by Aretino. Few books of any period carry as much punch as this small booklet of sixteen leaves.

There are not as many French as Italian books from the second half of the sixteenth century illustrated by known artists since early French artists are, really, lesser known. From 1550 on, engravings were more and more used as book illustrations, particularly in French books. More elaborate effects were possible, and the public had grown to accept the extra cost, both of the copper plates and the necessary double printing. There were even books entirely engraved, text as well as illustration. Then only one printing was necessary.

The French book with the finest early French portrait—that of Henry II, by the French artist Etienne Delaune—was published in Paris in 1560, just after Henry II died, the victim of an accident in a tournament. Another copy of this book, in the collections of Harvard University, contains in place of the Delaune an almost equally handsome portrait of the king in profile by René Boyvin. There is no way to know if the Boyvin portrait was made for a separate issue of the book, but probably not.



Homo natus de muliere, breui viuens tempo-
re, repletur multis miseriis: qui quasi flos
egreditur, & cōteritur, & fugit velut vmbra.

IOB XIII.



Omnis homo veniēs grauida mulieris ab aluo
Nascitur ad varijs tempora plena malis.
Flos citò marcescens veluti decedit, & ille
Sic perit, & tāquā corporis vmbra fugit.

Perhaps the most influential book of the century was Hans Holbein the Younger's *Dance of Death*, composed by the great German painter, jeweler, stained-glass-maker, and designer about 1524 in Basel, Switzerland, but not printed as a small book until 1538, at Lyons, France. Meanwhile the forty-one woodcuts were circulated and sold as prints. The cutter of these drawings, made directly on the block by the artist, was Hans Lützelburger, a consummate craftsman who perfectly rendered them. Copies were made in all countries of Europe, death being an ever prevalent phenomenon. Indeed, there has hardly been a decade since 1540 that a new edition, copied from earlier ones, has not appeared, wars, famines, and plagues tending to keep the subject on everyone's mind. (See left.)

From the Iberian Peninsula, this small, thin folio of twenty leaves, almost unknown, is a religious work on an order of nuns and is dedicated to King Manuel the Fortunate of Portugal. The *Misericordia* was printed at Lisbon in 1516. It is splendidly printed and illustrated, Portugal being very rich at this juncture from its control of the sea passage around Africa connecting Europe and the Far East, which it gained in 1498. The woodcuts on the left are by unknown artists. The elaborate interlaced woodcut capitals in red on the right are from late fifteenth-century German sources. (See facing page.)

Illustrated Spanish books of the sixteenth century are less well known than those of any other major European country. J. P. R. Lyell's bibliography of them is now half a century old and woefully incomplete.¹ The Hispanic Society in New York and the Library of Congress are well fitted to supplement Lyell's work.

Because of constant wars, plagues, and disasters, the seventeenth century was not to prove as great a period of illustration as either of the two centuries highlighted here. But it is also still the least known one hundred years, and the century contains many wonders worthy of description. We are still, too, only at the beginning of the study of sixteenth-century illustrated books, particularly of those from the last half of the century, the High Renaissance in all European countries. I most earnestly hope that just as Frederick Goff devoted years to a census of fifteenth-century books in America,² some young scholar will tackle the later period.

Into Something Rich and Of Dreams, Art, and the Unconscious

by Eleanor Cameron

Full fathom five thy father lies;
Of his bones are coral made:
Those are pearls that were his eyes:
Nothing of him that doth fade,
But doth suffer a sea-change
Into something rich and strange.
Sea-nymphs hourly ring his knell:
Hark! now I hear them—ding, dong, bell.

Composed almost four hundred years ago, these words, for me, express symbolically how the unconscious absorbs our experiences, buries them, turns them through slow transformations over the years—during which time they may, in their original form, be entirely forgotten—into treasure which emerges from the depths to be used by the artist in ways he could never have foretold. So perfect is this symbolism, one would think that Shakespeare, that majestic sub-creator (to use Tolkien's word), knew precisely what is now known about the unconscious: how it is a fathomless sea, perhaps literally boundless, holding innumerable experiences, both individual and racial, knowledges, intuitions the conscious is not aware of, and how it nurtures them, turning bones into coral and eyes into pearls, before releasing them to the thinking mind.

This article is based on the lecture given by Mrs. Cameron at the Library of Congress on November 14, 1977, in honor of National Children's Book Week and under the auspices of the Gertrude Clarke Whittall Poetry and Literature Fund.



Strange



From The Court of the Stone Children by Eleanor Cameron, illustration by Trina Schart Hyman. Courtesy of E. P. Dutton and Co., Inc.

Did he ever wonder, Mr. William Shakespeare, with a kind of awe, where it all came from, scene after scene that assaulted his imagination as if he had lived each one? Did he ever ask himself what there was in him that compelled this profusion and held him slave to it? For the writer, or any artist, literally cannot help himself. There would seem to be some ruling power in him that drives him to create and gives him the stuff of creation. Charlotte Brontë writes, in her preface to the second edition of *Wuthering Heights*, when she was troubled over Emily's characterization of Heathcliff, "But this I know: the writer who possesses the creative gift owns something of which he is not always master—something that, at times, strangely wills and works for itself."¹ Consider Flaubert's sense of doubleness when he tells of having to get up and fetch a handkerchief because he had been so moved by his own writing that tears were streaming down his face. There was the Flaubert who wept, and the one who had made Flaubert weep, two deeply united and yet, as it were, separate entities, so that one could think of the other as Faulkner did of his creating self in writing to his friend Joan Williams: "And I now realize for the first time what an amazing gift I had: Uneducated in every formal sense, without even very literate companions, yet to have made the thing I made. I don't know where it came from. I don't know why God or the gods, or whoever it is, selected me to be the vessel. Believe me, this is not humility, false modesty; it is simply amazement."²

Eleanor Cameron is the author of *A Room Made of Windows* (1971), which won the Boston Globe-Horn Book Award; *The Court of the Stone Children* (1973), winner of the National Book Award in 1974; and *To the Green Mountains* (1975), which was a finalist for the National Book Award in 1976. Her most recent book is *Julia and the Hand of God*. Her critical essays are collected in *The Green and Burning Tree*.

Her work in public libraries inspired the adult novel *The Unheard Music* (1950), a poetic story about a day in the life of a reference librarian at the Berkeley Carnegie Library.

Born in Canada, Mrs. Cameron moved to California as a young child. She now lives on the Monterey Peninsula, where she is an active member of wildlife preservation societies. She is also on the editorial board of *Cricket* magazine and on the advisory board of the Center for the Study of Children's Literature at Simmons College in Boston.

Flaubert and Faulkner must often, I should think, have reflected on "where it came from," the source of their art. Whether Shakespeare did or did not, we shall never know, or what he called his teeming storehouse, but we can at least say that he did not call it the unconscious. When did that word come into use, I asked myself, and picked up the book lying by my side and opened it at random to page five, where my eye lit at once upon the reply. "Each of them (sleep, the imagination, dream, the Unconscious, art, genius, death) has been an agelong problem; for even the term, the Unconscious, used for the first time in this sense so recently as 1909, was only thereby made specific."³

I use Jung's term *the unconscious* rather than Freud's *the subconscious*—for Freud a dark basement of repressed desires—because like de la Mare, who told me so instantaneously what I wanted to know, I respond to Jung's concept. For Jung, the unconscious was a world as vital and real as the conscious world of the individual, at least half of his total being, and far wider and richer than that of his thinking ego. From the unconscious, says Jung, comes advice and guidance that no one or nothing else can give; its language and its protagonists are symbols, and its way of communication is through dreams, or the creations of artists, or the fairy tales, myths, and legends that have come down to us over thousands of years from the memories of our race. All are connected. Carson McCullers spoke of writing, for her, as the flowering dream. "After months of confusion and labor," she said, "when the idea has flowered, the collusion is Divine. It always comes from the Subconscious and cannot be controlled."⁴

Dreams like art, like myth and legend and fairy tale, speak in poetic images. For example: My husband has been ill, and because of a doctor's mistaken prescription for therapy, which has resulted in increased pain, he says, "He has ruined me." That night I dream that I am in a ruin and turn to speak to my husband but he is no longer there; he has vanished, and I go over to a fallen wall to hunt for him, but I have lost him. I then see him on my right in front of a fireplace in a long, narrow, roofless room. He is sitting in a yoga position as if given over to contemplation. I go to him and he turns into a small oriental figure of fired red clay like the Japanese figures on top of my bookcase, still sitting

in a position of calmness and serenity, of meditation, as though trying to attain wisdom. But now suddenly he becomes a little girl of nine or ten and I realize that she is to be my child, and that I have been given her in place of my husband. We are going along a crowded street in Los Angeles and she looks around in amazement and says that she somehow recognizes this street though she cannot remember ever having been here before. I tell her that of course she recognizes it, as she is in reality my husband, who used to live and work here in Los Angeles. She bursts into tears and I try to comfort her by saying that I will love and care for her and that she is not to worry about anything. And I myself know that only through my own patience and devotion will she be transformed back into my husband.

What does it remind you of? Yes, a fairy tale. In the true fairy tale, as in the true dream, says Edward Böök in his life of Hans Christian Andersen, there lies always the force of a dark message.

I have felt for a long time that my dreams are a significant part of my life, and have written down those I could recall with startling clarity. Some have stayed with me since childhood; the earliest I have remembered in every detail since I was nine. And I can see now how two series of dreams point, each series in its own way, to what must be an unconscious preoccupation: a sense of lostness, of which certain dreams of de la Mare's also spoke to him. I was comforted to know that he too had had this sense, though why he had it he never told, so far as I know, and I am mystified about myself. In my conscious life I have never felt overwhelmingly lost, only as if I am continually searching. At times struggle is involved (or is this only in connection with writing? I can't be sure; but then writing can be a search for meaning, which can go deeper and deeper as the years pass), so that possibly this is my "lostness": not having yet found what it is I am searching for. But I would add that I need the struggle and the search; life would be pale without them, and I am accustomed to living with uncertainty.

Cathy, in *Wuthering Heights*, says, "I've dreamt in my life dreams that have stayed with me forever after, and changed my ideas; they've gone through and through me, like wine through water, and altered the colour of my mind." ⁵ De la Mare says that that is surely the voice of Emily Brontë her-

self, and that with some qualifications, it had been his own experience. Yes, and mine, though I had not realized how much dreams meant to me until I remembered how often I have introduced them into the texture of my books, not as embroidery, something that could be picked out, leaving the weave intact, but as a necessary part of the whole. There are two premonitory dreams in *The Court of the Stone Children*, inextricably knit into the pattern of meaning because of the central idea that if time is an eternal present, as I believe it to be, precognition is inevitable for those whose narrow human slits of awareness are widened on certain occasions so that they know ahead that which, according to human time sense, still has not happened. There is, also, near the beginning of the book, Nina's dream of lostness in which, trying again and again to telephone home, she exclaims to the telephone operator that time is passing, to which the cool voice replies, "Time is a river without banks. If there are no banks, there is nothing for time to pass." Chagall's painting *Time Is a River without Banks* hangs in the museum where Nina has seen for the first time the girl who has come out of time to fulfill her own dream of precognition and to inadvertently bring about Nina's. And when Helena Staynes, one of the curators, says to Nina, "And what do you make of the painting?" Nina answers, "I don't know. I wish I knew what it meant. It's like a fairy tale—or a dream. . . ." And Mrs. Staynes says, "Yes, it is. You've hit it exactly. . . . If you try to make sense of it by means of logic, you can't, because Chagall is always remembering his childhood and so, probably, his childhood dreams, and the feeling of losing himself in fairy tales."

To the Green Mountains begins with a dream, Kath's, of coming back in summer to a mountain-side on which—and now, even as I sit here writing these words, the repetition strikes me for the first time—"she has an intimation not only that she is alone in this vast solitude but that she is lost." Here I am again. I keep saying it and keep saying it, in one way or another: I seem to make opportunities for saying it. "An intimation that she is lost," but "that she has climbed this path before and has come to her longed-for destination. No, she cannot say that. Rather, she has looked down upon it, though always the moment of actual arrival has been denied her." And with Kath once again look-



From *A Room Made of Windows* by Eleanor Cameron, illustrated by Trina Schart Hyman. Courtesy of Little, Brown and Company.

ing down on her grandmother's house, down there in the valley, and the loved figure she can never seem to reach, she wakes as always, just before beginning the descent.

Two more dreams come into the book, both, now that I come to think of them, of lostness: the first of Kath being abandoned in a city theatre by Tiss, the black girl whose valued friendship she has lost at the time of the dream, and the second of finding herself at her grandmother's house at last but realizing that there is no one there: "The garden was all gone to seed. There were no curtains nor even any blinds, and the porch was dusty and littered with old papers and dead leaves, and nobody answered the door." A terrible kind of lostness: to reach a place after years of effort where someone much loved has been waiting, only to find that that persons has not been there for a very long time, died, or gone away, and no one has told us when, or where, or why.

Near the beginning of *A Room Made of Windows* twelve-year-old Julia takes from her desk drawer an unfinished story, a dream she has written down and now tries to continue as best she can, but it will not round itself out. It ends, simply because it will go no further, with the man she feels she knows in some intense and personal way going out of the tall, dark house into which she and a mob of unknown people have pursued him. He turns and

hands her his mask, whereupon she takes it and in terror slams the door against him, but cannot lock it because the lock has been broken by the mob who forced it open to follow him with some evil intent. At the book's end, Julia realizes the man was her dead father and it is Rhiannon Moore, the musician who lives next door, who interprets her dream and tells her what will be meaningful to her later as a writer—having been handed on her father's complex qualities of willfulness and passion and persistence and intensity in the symbolic form of his mask.

This dream of Julia's is based on an exceedingly long and complex one I had as a child only a little older than Julia, and that I wrote down and still have in my possession. A simplified version is given in the novel because my dream would have taken up a disproportionate amount of space and I did not want to obscure the essential details. At the end of my youthful account of it, I noted: "I cannot explain the plot—for there is a distinct plot woven therein. . . . I can think of nothing in the past that has happened to me to connect with this strange dream."

What has astonished me in connection with my own discoveries of a preoccupation with lostness is the case of the dreams of Walter de la Mare, surely one of the kindest and gentlest men who ever lived. Yet, as one discovers upon reading his stories and

poems for both children and adults, there is more often than not a haunting sense of the powers of evil, an obsession with death and ghosts and graveyards, with people like Seton's aunt who prefers the company of the dead and who absorbs the living as a mantis absorbs insects, and others like the dreamy, absentminded grandmother whose old oak chest swallows up the seven children in "The Riddle" and they are never heard of again.

De la Mare dreamed that though he had no reason for murdering her, he had killed his sister, then claimed that he had not. When he went back to the upstairs room where the murder had taken place, he did not recognize it; yet he went immediately to a chest, opened the bottom drawer, and groped about for the clothes he had been wearing to prove they were clean and that he was therefore innocent. But when he withdrew his hand, it was sticky with blood. He related also dreams of two other murders, both of which he committed. In the second he saw an old woman sitting in a chair. To the side of the chair was a door with a space beneath, and he knew that beyond was a hall where there were people who would hear any audible movements. Nevertheless, with no sense of revulsion, he leaned forward and plunged a knife into her, then noticed, when the blood began to flow, that it would run along the sloping floor toward the space under the door. At once he found a cloth and a leather bucket (why a medieval object, one wonders) and began to sop it up, then turned abruptly at some sound and knocked the bucket over. Now he looked out at the apparently dawn sky beyond the tall Gothic windows and noted the red in it—precisely the color of the spilled blood making its way toward the door—whereupon the dream ended. How could anyone explain that dream, demanded de la Mare. Who had constructed a story at once so complex and so coherent?

There you have it again, the intimation of some power at work, in this case giving the dreamer his dream; the ghostly provider for the creating mind as Faulkner implied concerning the novelist and what he writes: some larger unconscious, possibly, as Jung believed, speaking to the individual unconscious. Graham Greene asks, in his novel *The End of the Affair*, "I say 'one chooses' with the inaccurate pride of the professional writer who—when he has been seriously noted at all—has been praised for his technical ability; but do I in fact of my own

will choose that black wet January night on the Common in 1946, the sight of Henry Miles slanting across the wide river of rain, or did these images choose me?"⁶ The Bushman, cocooned in his ancient wisdom, says of human life that "There is a dreamer dreaming us," and Joan Aiken, at the end of her 1971 Library of Congress lecture, tells of a marvelously complex and coherent dream of which she says, "I didn't have it, it had me. Words won't convey its blazing intensity."⁷

Three experiences of Graham Greene's are curious exceptions to Jung's belief that dreams are extremely personal expressions of the unconscious, meaningful to the dreamer alone, rather than artistic expressions, and that only the conscious can, through the process of discrimination, turn what the unconscious gives us into art. Greene notes of his story "The Root of All Evil" that he dreamed the entire thing and woke laughing, and that he did not change a single incident, nor did he after dreaming "A Sense of Reality." In *A Burnt-out Case*, identification with character went so far that Greene actually dreamed Query's dream, about which he is certain because the memories and symbols and associations of the dream belong specifically to Query, so that the next morning Greene could put the dream without change into his novel, where it bridged a gap that for days he had been unable to close.

Jung believed that we do not dream our dreams, but that they happen to us, as experiences happen to us, which would perhaps explain the complexity and coherence and sophistication of that childhood dream of mine about the mask, seemingly too old for me, a version of which wound its way into *Room*. Does, then, what we create as novelists "happen to us" in the same sense if we draw on the depths and not merely from the surface? Elizabeth Bowen has written of Katherine Mansfield that "there were times when [she] believed a story to have a volition of its own—she seems to stand back, watching it take form. Yet this could not happen apart from her; the story draws her steadily into itself."⁸

The question of what we create happening to us may find a response in several facts. First, what we ourselves write can instruct us, give us revelations about that which we were not previously aware of; symbols and themes can later be discovered that we did not realize were there; and the completed work can say something to us that we did

not realize it would say. Second, characters are discovered. They are given, either gradually revealing themselves as the work progresses, or presenting themselves entire as though they had been waiting, existing like living beings "full fathom five." Only if one were to construct creatures to fit a plot, to be used purely for the purposes of plot, would one be aware of mechanically putting them together out of bits and pieces, all of which would have nothing to do with the unconscious. Third, like the dreams of Walter de la Mare and Joan Aiken and my child and adult self, what we write can seem to coalesce into amazingly complex and yet perfectly coherent patterns without conscious effort on our part—that is, the coherent complexity itself does not cause conscious struggle: all seems to weave together, sometimes with astonishing rapidity, as though the weaving had already been accomplished. Fourth, the unconscious has the ability to recall to the conscious mind, under pressure of the author's writing about a certain time and place, scenes and events long forgotten.

Concerning the ability of the writer's work to instruct him, one of the most remarkable instances of this is brought out by Mark Schorer in a few paragraphs on Emily Brontë. He makes no mention of the unconscious, however. Quite the contrary! He speaks of Emily's somnambulistic excess, generated by years of writing about a world of "monstrous passion, of dark and gigantic emotional and nervous energy,"⁹ that was for Emily the ideal world. It was one she had lived in since childhood, the natural atmosphere of her most private being as set down in those interminable stories she called her Gondal Saga.

What Emily wanted to do in *Wuthering Heights*, according to Schorer, was to persuade us of "the moral magnificence of . . . unmoral passion."¹⁰ She wanted us to accept at their own valuation such demonic beings as Heathcliff and Cathy. But then, says Schorer, because of a "mere mechanical device"—technique—and because "technique objectifies,"¹¹ the novelist Emily Brontë revealed to the girl Emily the absurdities of her own conception. Her technique, as the novel progressed, exposed those absurdities for what they are, so that in the end we are persuaded that it is not Emily Brontë who was mistaken in the estimate of her characters, but they who were mistaken in their estimate of themselves. Technique alone, Schorer believes,

taught Emily that the theme of the moral magnificence of unmoral passion is a false one, and that it was not what her material meant as art.

Now I can well believe that Emily Brontë's novel instructed her as to the truth. But I am not willing to believe that it was merely technique, merely "a mechanical device" that persuaded Emily of the hopelessness of idealizing a world of demonic passions, together with its values, as she had at first thought to do.

The heart of the matter, it seems to me, the secret of what happened to Emily Brontë, is that her aesthetic intuition, her unconscious, call it what you will, chose as place for her novel not the imaginary world of Gondal she had lived in as child and adolescent, but Haworth country. And with that choice, because Emily knew Haworth country and Haworth people as she knew her own home and family, she was compelled to plunge into reality rather than, once again, into fantasy as she had done in the Gondal Saga. Whereupon the full force of her conscious and unconscious knowledge of the peculiar Haworth breed of human creature forced truth into the final pages of *Wuthering Heights*, despite the fact that Heathcliff remains a melodramatic figure throughout the novel. And that truth is that unmoral passion could not possibly call up a tale of moral magnificence, but could only resolve into, as Schorer puts it, the "devastating spectacle of human waste"¹² that *Wuthering Heights* turned out to be.

Glenway Wescott believes that writers of fiction learn from their material as the work unfolds, learn from "the phantoms of memory and from the powers and accidents of art."¹³ They do indeed learn from their own material, but I think that a good many of "the powers and accidents of art" are flowerings of the creative unconscious, sudden, inexplicable revelations that can make the work of writing a novel an utterly absorbing adventure into hitherto unknown territory of the self. Ursula Le Guin wrote, at the time she was working on *The Farthest Shore*, "I finally finished a second draft last Friday, but have been fairly cross-eyed since. I have been working on a third volume—a trequel?—of the *Wizard*, and what happened was that Ged got the bit between his teeth, as it were, and started telling me things I didn't know, and doing things I hadn't intended him to do, and he changed the whole end of the book, and fouled me up good and

proper. Damned strong-minded wizard." ¹⁴

I myself have felt the power of what I can only call some kind of ordained pattern which had, apparently, worked itself out during the years *To the Green Mountains* was developing to that stage where it could finally be composed in words. At two points in the writing of the novel I felt the power of inevitability. Apparently there was one way to tell the story and one only, and I, the author, could not change it. Well, of course I could have changed it! I could have done anything I wanted with my own work, but my judgment, my self, knew that it would be unwise. First of all, I had thought from the beginning (and that was about thirty years ago, when I wrote *Mountains* as a one-act play) that Tissie, the black woman, would come up to Elizabeth Rule's hotel room with a straight razor hidden in her pocket, intent, out of jealousy and hatred, on threatening Elizabeth and possibly in her rage doing Elizabeth actual harm. But what was my astonishment upon arriving at that chapter to find that Tissie was not going up to Elizabeth's room, Tissie having revealed herself to me as not at all the kind of woman who would threaten another human being with a razor or any other instrument. Yet all this time, for years, she had been supposed to. There were a good many things I realized I did not know about my novel, but that one thing I thought I knew. However, she could not possibly, could she? I said in answer to myself. No, she could not, the point being that the razor incident (something I had known about that actually happened) was an act I had taken for granted I could give Tissie. But it was not, I discovered, an act she had shown me she was capable of and would do, and there is a world of difference there. The Tissie given me, my Tissie (who must have been there inside of me the entire time as a completed person, so that she could gradually reveal herself in one aspect after another under the pressure of various circumstances), was a woman of high passion, yes; full of delight in living, prone to laughter, to dancing, imitating, acting, teasing, but with, nevertheless, a most private, withdrawn place deep within that complex self of hers, a place of dignified reserve. So that when the world of her husband Grant's wholehearted devotion to her becomes divided because of the lawbooks Elizabeth Rule, in an act of blind good faith, has given him, Tissie does not go up to Elizabeth's room with a

straight razor. Once it becomes clear to her just how the books are going to affect her life with Grant, she simply never has anything to do with Elizabeth Rule again, nor with Kath, the child who loved her and who had loved, above anything else, being with her. A friendship, unquestioning and trusting all these years, simply vanishes as if it had never been. That was the truth about Tissie, and she revealed it to me.

Second, I did not want Tissie to die. Before I knew I did not want her to, I had envisioned the train scene, where she is run over, with great vividness. I saw it; I heard the words of Kath and of Aunt Maud and Uncle Tede, who did not want her to come near Tissie, though Tissie wants to speak to Kath. I could have handled it, I believe, and without either sentimentality or crudity. There was no reason why there should not have been such a scene—children have been present at railway accidents times without number. But then I discovered that I did not want Tissie killed. Not necessary, I tried to tell myself, not at all necessary. But I could not change it, though I ran around mentally, like a squirrel in a box, trying to find a way out of my dread necessity. And this is what I mean by inevitability, a sense suddenly apparently lacking in William Mayne, usually a superb artist, when he wrote one ending for the British edition of *The Jersey Shore* and another for the American. Perhaps he had not waited long enough for his unconscious to tell him the right ending. Certainly, for me, the American (written later) is the right and good one. In fact, so strongly did I feel this that I somehow knew that the main character Art would be killed in battle after the written part of the story was over, so that I was not in the least surprised when I was told by his editor that Mayne himself had, in fact, known that Art would be killed beyond the novel's end. I never for an instant felt this in reading the final chapter of the British edition.

At any rate, Tissie had to die. And I cannot tell why except that partly it was the final piece in the pattern which I see now, on looking back, as one of "downhill all the way," step by fateful step. And I could not bring Kath onto the scene of the train accident because Uncle Tede would not let me. He came toward Kath with his hands out and turned her and led her back the way she had come with Aunt Maud following after.

Another thing that was discovered was a second

theme. I thought I had only one: that of the necessity for human beings to face what is, not to fool themselves, which was why, after finishing the book, I put Alfred Kazin's words at the beginning: "facing a fact until it divides you through the heart and marrow like a sword." Now I do not mean that I wrote *Mountains* in order to demonstrate this theme. I wrote the book because I had a story to tell and could not rest until I had told it, and told it in a certain way. Then as I went along, the theme became apparent. I felt it there. And also I began to feel something else, just as strongly, or even more strongly: that I was writing out my abhorrence of possession, writing out a deep belief in a personal eleventh commandment: thou shalt not try to possess another. No review brought out either theme, but they are there, and when a friend asked me,

"But, Eleanor, what were you trying to say?" and later began telling me that she had had to leave her husband because he had insisted on trying to control every detail of her life, she stared at me and laughed. Of course! But I had not seen, until quite some time after the book was finished, how many instances—in the case of couple after couple, husband and wife, sister and sister, mother and son—exemplified, each in its own way, various kinds of possession, successful, attempted, and failed.

It is my books that have shown me that this theme of possession or attempted possession of one human being by another, and the unhappiness and frustration and bitter resentment it can bring, is apparently a preoccupation of mine. In *Room* the theme grew out of place because it was in Berkeley that I, myself, was a selfish child. Julia, in her youthful blindness, tries to possess her mother, and it is not until she is faced with her mother's words—that for her, children are not enough—that Julia is forced into the knowledge that she must allow her mother her own life, must allow her to be her own person and not simply an extension of Julia, existing solely for Julia's comfort and satisfaction. I suppose you could say that it was necessary that the windows of Julia's room, where she made up her stories and looked out onto the public world from the isolation of her private one, become win-



From A Spell Is Cast by Eleanor Cameron, illustrated by Beth and Joe Krush. Courtesy of Little, Brown and Company.

dows of the self through which she must observe others as individuals with desires as passionate and needful of fulfillment as her own. I did not see the symbolism of the windows until it was pointed out to me later, and it was my editor who saw the room as symbolic of Julia's closed self-centeredness. The fact is, I was simply writing about the kind of room I had had as a child.

Concerning possession in *The Court of the Stone Children*, the book has as its central event in the past the rejection of Napoleon's tyranny by Antoine de Lombre, because of which he is shot. But there turns out to be another preoccupation, something which I had felt during the writing but had not consciously enunciated to myself, and which a friend told me was of central significance to her, an artist. Again, as in *Room* and certainly as in *Mountains*, whatever significance there is, indeed the very story itself, grew out of place, because place is something without which my unconscious cannot conceive a book, and I should think this might be the case with a good many writers. If the seed of story finds no particular place to fall, no particular environment to breathe in and get light from, it dies. But that is not put in the right way. Place makes story by making possible certain characters out of which story grows.

When I was a child, after we left the house with the room made of windows, our home on a hillside in Berkeley had a 180-degree view of cities, bay, and ocean. Directly opposite our western windows stood the Golden Gate, where San Francisco Bay and the Pacific interchange their waters. For me, then, San Francisco was a magical place, with its enormous wooded park and museum, its cable cars, its swooping streets all giving views of islands, of Marin County across the Golden Gate, and of my own little city over there on the other side of the bay, minuscule with distance.

And the core of my fascination centered on the museum which evoked for me—though I did not realize it then, staring at the remains of mummies, at Sumerian and Egyptian and Greek and Roman jewelry, and the elegance of chateau rooms brought from France—the poignancy of human beings hundreds or even thousands of years gone who had made and used these things, smoothed gradually with their hands and their clothing these very objects—hand mirrors, boxes, tables, chests, chairs, cabinets—on which I fed my imagination. What I felt then

eventually resolved itself into the firm conviction that the notion of the three tenses of time is an illusion of our necessarily limited senses, so that the concept underlying time fantasy became to me not fantastical at all but one having its basis in reality. In *The Court of the Stone Children* I combined this belief, one going back through the millenia and shared by black and yellow and red men alike, and only much later by white, with my intense and special childhood sense of San Francisco as at once a city like no other and the place where I had experienced the "Museum Feeling."

I gave that feeling to Nina and something else as well that I myself had had as a child from the wrought artifacts and the chateau rooms: a loving appreciation of a certain kind of beauty other than natural, that which is humanly fashioned, contained in objects shaped by cultivated perceptions, expressions of civilizations not engrossed simply in the pleasures of business and the body and society, but in making with patience and devotion what would be the revelation of an aesthetic vision. This was what spoke to my friend and had significance for her: the effect of art on the sensibilities of a child who had never been brought into contact with it before.

As for character creation and the unconscious, I have already touched on this in speaking of what Tissie as good as told me she would and would not do. And I suppose there is nothing more mysterious than the ability of the unconscious to present the writer with his characters. It has been insisted that characters are only the prototypes of people we have known, and I would be willing to admit this—but only to a degree, only in my own case, in certain instances. I continually mingle people I have known with those who seem to me wholly given, wholly discovered, and I am aware of no difference in the quality of their responses to the story they are causing to progress. But whoever I have known becomes a novelistic self.

My mother and I were very close, even though we sometimes got at loggerheads in our younger days and could not see the other's point of view because of the ways in which we were alike. She was a power in my life and at times I rebelled against that power until the time came when I no longer had any need to because I began to understand her and myself a little more clearly. At any rate, she has come into my last books as the mother

of the child each novel is about, and this has perhaps been unimaginative of me except that it somehow could not be helped. These books came after *The Green and Burning Tree*, a collection of critical essays on children's literature, which has seemed to divide my work in two so decidedly that some have told me they were surprised to find it was the same Cameron who wrote the early books as the late. What has happened is that I have now been basing (but only basing) them on childhood experience, using an actual situation as the takeoff into events that never happened in real life, whereas the earlier books are wholly imaginative.

In each of the later books my mother is there in essence, though only a part of her is there in each of the three women. There was no need to make an effort to do this—it came about because of place. For me, as I said earlier, place makes story by making possible, indeed I could say by making inevitable, certain characters. The mystery to me is why place—and time—should have called up three different essences of the same woman. In *Room* she was one who was compelled to say to her daughter that, for her, children were not enough because she did not feel whole without a man to share her life; in *Mountains* one whose dominant quality was independence, the ability to manage, specifically to manage a hotel, and the desire to manage the headwaiter Grant's life to the extent that she would change it without discussion with anyone because she could see so precisely what ought to be; and in *Court* the kind of woman for whom responsibility comes first, responsibility to circumstance, to making something decent of life but only within dependable circumstance, so that Nina thinks of her as habitually saying, "We must—we must—one must always" do this, that, or the other. The sense of duty. And all of these qualities were present in my mother: the femininity that struggled out of my own possessiveness toward someone she loved, the spunk and the courage and the ability to direct affairs, and as well the eternal sense of responsibility to circumstance with a view to shaping it toward its best ends. And yet my three women, different from each other, are also different from my mother, because each novel magnified one central quality around which others coalesced so that each novelistic essence is her own person.

Virginia Woolf wrote of her mother: "It is perfectly true that she obsessed me, in spite of the fact

that she died when I was only thirteen, until I was forty-four. Then one day walking round Tavistock Square I made up, as I sometimes make up my books, *To the Lighthouse*; in a great, apparently involuntary, rush. . . . I wrote the book very quickly; and when it was written, I ceased to be obsessed by my mother. I no longer hear her voice; I do not see her."¹⁵ That fascinated me because I have wondered at times if I have been similarly obsessed. Virginia Woolf says that she supposes she did for herself what psychoanalysts do for their patients. Am I, then, like her, expressing "some very long felt and deeply felt emotion," and in expressing it, explaining it and then laying it to rest? ("But what is the meaning of 'explained' it?" Virginia Woolf wonders.)¹⁶ I do not think so. I have been haunted by my mother and the quality of her life, yes. But I have had no need to write her out of myself. I still see her, still hear her voice and laugh, and shall no doubt go on doing so. She is still with me though she died seven years ago; and I want that presence, the seeing and hearing.

As for those characters who have been given, who have no prototypes, I ask as many another writer must have done about his own visitations, where do they come from? Where did Tissie come from? I have never known anyone even remotely like her. Where did Rhiannon Moore in *Room* come from, someone else completely given. I had thought I was ready to begin the novel when one day I saw Julia, in my mind, go over to the fence at the back of the brown bungalow, where I used to live, to speak to a woman in a dressing gown with her long gray-streaked hair tied back. She had just come out of the two-story barn-red house next door and she and Julia met at the fence and started to talk, and from that moment were fast friends in the special way only the very young and the old can be. I saw this happen. It happened with complete unexpectedness, and from that moment Rhiannon Moore took a central place in the book.

I do not see how the fact can be other than that in the depths of the creative unconscious the whole, given character must exist, for the writer has never to wonder what that person would do under certain circumstances. One knows, infallibly and unerringly, without having to stop and think. And it has often seemed to me that if one did have to cast about in order to find the answer, then that character must not naturally and deeply be one's own and that a serious flaw is likely to be woven into

the novel which could become increasingly serious—felt subtly at first but with increasing proof of artificiality as the novel progresses. For the writer would constantly run the risk of having that character, purely for the sake of imposed story, do something that would run contrary to his inmost nature. Unless of course (and this is most likely if he is a “made” character) he is presented so shallowly that he would have no inmost nature. But even minor characters in memorable novels have inmost natures. The writer perceives them, and even if they come into the novel only briefly, he will have a distinct feeling about their essences, as Walter de la Mare does about the old sailor, the Oomgar, who befriends little Ummanodda Nizza-neela in *The Three Royal Monkeys*, and Ursula Le Guin about Ged’s dear friend Vetch in *A Wizard of Earthsea*.

I quoted, above, Virginia Woolf’s words on the conception of *To the Lighthouse* in order, there, to bring out the ridding of an obsession through the author’s writing the object of it into a novel. And the way the novel came to her, “in a great, apparently involuntary, rush” brings me to the third way in which the working of the unconscious seems to the writer some arcane and mystic process. Virginia Woolf used the words “apparently involuntary” as if she knew that her sudden visitation was not, in fact, purely of the moment, purely of the mind’s conscious making. And she goes on: “One thing burst into another. Blowing bubbles out of a pipe gives the feeling of the rapid crowd of ideas and scenes which blew out of my mind, so that my lips seemed syllabing of their own accord as I walked. What blew the bubbles? Why then? I have no notion.”¹⁷ In my own way, I have had that experience. I had thought that, having gone backwards from *Room*, where Julia is twelve, to *Julia and the Hand of God*, where she is eleven, that I was finished with this child. But I was reading Monique Wittig’s *The Opoonax*, when suddenly I beheld the garden where Julia had played at the ages of six and seven, and the voices and the happenings began, “the crowd of ideas and scenes,” one bursting out of another just as Virginia Woolf described it. And I believe that I am committed.

But despite the apparently involuntary quickness of conception of her novel in the case of Virginia Woolf, we know that it was not a visitation out of nowhere. She was forty-four when this happened, and when she was nine, on vacation in Cornwall

at St. Ives across from the Godrevy Lighthouse, we learn from *The Hyde Park Gate News*, which she produced for her family, that Virginia and her two brothers Thoby and Adrian were invited for a sail to the lighthouse on a day of “perfect wind and tide for going there” and that “Master Adrian Stephen was much disappointed at not being allowed to go.”¹⁸ And so for thirty-five years that day of perfect wind and tide and of the keen disappointment of the little boy who had had to stay at home had remained in her unconscious. It must have been her unconscious, for she gives no hint in her account of the book’s inception that she recalls the incident she recorded when she was nine; yet surely that day and its intense joy, for her, must have lain there weaving itself into a novel all that time, ready to break forth as if newly conceived by the conscious mind as Virginia walked around Tavistock Square. But why on that particular walk; why at that moment? She herself asks, “Who blew the bubbles? Why then?” and answers, “I have no notion.”

When the first urge for a book comes rushing in, when it comes quickly like this, it is a kind of bliss (and I do not mean that this guarantees its goodness!). Then either the book is written immediately, as in the case of *To the Lighthouse*, or one goes about the daily business of living knowing now that the unconscious is at work and that over a period of time the book is getting itself ready to be written. Later, after writing has started, the presentations of the unconscious continue, sometimes in long, pouring spurts when the conscious and the unconscious seem in perfect harmony and the right tone, the right voice, is found without effort. Or with struggle, when the conscious strives to find the tone that will satisfy.

In fact, I often picture the self as objective editor or judge. True it is that self can only be objective to a degree because it contains the conscious and the unconscious. But the cooler the self is in listening and judging—in other words, the more aesthetic distance can be attained—the better the work. The material can be hot, but the judgment must be cool. And by hot I do not mean a scene of violence, but that the writer has been cutting into the bone of truth, whether the scene be light or somber, comic or harsh. Cutting into bone is always the hope, rather than skirmishing over the surface because one has not the knowledge, the ability, the wisdom,



From Julia and the Hand of God by Eleanor Cameron, illustrated by Gail Owens. Courtesy of E. P. Dutton and Co., Inc.

or the patience to hit the bone itself. If I know I am skirmishing, then I know further that it is a matter of waiting in order to be given insight, which is the voice of the unconscious. And whenever it is a matter of waiting, I am depending upon and trusting to the unconscious to send its message. Is it, then, that the unconscious knows better than the conscious? It would seem to me that it does and when I go astray, when I am struggling, it is because I have not waited long enough, or have not kept the channel clear, or have misinterpreted.

And it is always a matter of waiting, never of forcing, because forcing is fatal. In fact I believe that forcing is fatal no matter what we do.

Katherine Mansfield felt that for her "each idea for a story had an inherent shape, that there could be no other for it, that it was for her to perceive that shape, and that it was far more a matter of perception than construction."¹⁹

Carson McCullers tells us that for a whole year she worked on *The Heart Is a Lonely Hunter* without understanding it at all. Each character was talking to a central character, but why she did not know. "I'd almost decided," she has written, "that the book was no novel, that I should chop it up into short stories. But I could feel the mutilation in my body when I had that idea, and I was in despair. . . . Suddenly, as I walked across a road, it occurred to me that Harry Minowitz, the character all the other characters were talking to, was a different man, a deaf mute, and immediately the name was changed to John Singer. The whole focus of the novel was fixed and I was for the first time committed with my whole soul to *The Heart Is a Lonely Hunter*."²⁰

Vladimir Nabokov has spoken of inspiration at work "mutely pointing out this or that, having me accumulate the known materials for an unknown structure. . . . I feel a kind of gentle development, an uncurling inside, and I know that the details are there already, that in fact I would see them plainly if I looked closer, if I stopped the machine and opened its inner compartment; but I prefer to wait until what is loosely called inspiration has completed the task for me."²¹ He looked upon the structure of a book in process, "dimly illumined"

in his mind, as comparable to a painting upon which he could work at any point, never from left to right or from top to bottom, but upon any part which involved him most strongly, and keep working until all the gaps were filled in.

Related to Nabokov's sense that the whole work must somehow preexist in the unconscious ("the details are there already") is Graham Greene's observation that in the course of writing a novel "somewhere near the beginning for no reason I knew, I would insert an incident which seemed entirely irrelevant, and sixty thousand words later, with a sense of excitement, I would realize why it was there—the narrative had been working all that time outside my conscious control."²²

Lewis Carroll said of the waiting process, the slow coalescing of the final version of *Alice in Wonderland* and of taking only what was given: "In writing it out, I added many fresh ideas, which seemed to me to grow of themselves upon the original stock; and many more added themselves when, years afterwards, I wrote it all over again for publication; but . . . every such idea, and nearly every word of the dialogue, came of itself."²³

Mark Twain, too, firmly believed that a novel should come of itself, that his unconscious was vitally involved and that if it did not freely give him its material, there was no point in continuing. The case of *Huckleberry Finn* with relation to waiting and the work of the unconscious is surely one of the strangest on record. For it was not only the writer who waited, in the beginning, but later the unconscious that had to wait, when it wanted only to give.

Mark Twain began work on "another boy's book," as he called it, in 1876, but was not engrossed, indeed started the writing, he said, simply to be at work at something, liked it "only tolerably well," and intended either to pigeonhole or to burn it when he had finished. But long before he came to the end he had set it aside and continued to ignore it for four years. In 1880 he took it up again, remained unenthusiastic, and abandoned it once more. Then in 1881, following that memorable visit to the Mississippi that was to make the great river central to *Huckleberry Finn*, Mark Twain suddenly became imbued with such a frenzy of creative energy that the book flowed from his pen day after day. However—and this is the inexplicable part—even though the unconscious was at last

working full force in a way that would have overwhelmed any other writer with gratitude, Mark Twain allowed the most unimportant projects to tease him away from his work, so that in full spate it was forced to wait while he vitiated the hot, rich energy that should have gone into it without interruption.

When at length *The Adventures of Huckleberry Finn* was completed, Mark Twain began to realize in some degree what his unconscious had granted him. Yet even so he could not have guessed that his book was to be one of the seminal forces in American literary history, a book that was not particularly valued by its author until the response to it began growing, and that had had to wait interminably upon second-rate affairs before being given its completed expression.

Finally, to speak of place and the unconscious, something I touched on earlier, childhood place specifically: *Mountains*, a book that waited so long to be written—thirty years, at least—rose out of the deepest layer of any book so far attempted; it came out of the years of very young childhood. Nothing that happened in it actually happened; only the place is as it was, and a certain situation, the fact that I lived in a hotel between the ages of three and six. It was a book that had a long, slow parturition partly because I was uncertain of how it should be written, from whose point of view. And some element of my uncertainty came from the fact of having left Ohio behind so many years ago. Could I relive my place? Of course at any moment I felt moved to begin the book, I could always go back and explore that little town for as long as was necessary. But somehow, I did not go, nor did I tell myself why, and only when it came to the possible moment of going was an answer given.

I was about to begin writing when, in the scheduled order of events, I had to go east and there was no reason why I should not stop off in Ohio and take the train to that tiny spot on the map I have called South Angela. I stood at the desk in the airport having, as I had thought, completely made up my mind as to what I intended doing. "But do *not* do it," something said. "Trust to the aesthetic impulse."

I may never realize my subtlest reason for not going, if there was a deeper one, but I believe I was right in obeying the advice given me, which meant, it seemed to me, that all of the impressions of childhood are still there in the depths and that creation

can do its best work, the most aesthetically satisfying work, with what is part of the unconscious and can freely combine with imagination, rather than with what has been freshly observed and recorded. Whether I was right or not I shall never know. I know only that I could never have foreseen all that would rise to the surface in the actual act of writing—scenes, details of street and countryside and the interiors of houses, gestures, sounds, smells I had not thought of in all these years. Much had already come to me, but it was the act of writing that brought me, finally, what I needed for place.

To sum up: the unconscious would seem to give the novelist, if he will allow it to, the material of the novel—its characters, the voices speaking, its landscape, and its construction—while it would seem to be the work of the conscious to discriminate as to expression, though, as I have said, words will sometimes come in an apparently unpremeditated flow that seems like a blessing. However, these words must be looked at later with a cold eye to determine their rightness. For style is content; meaning subtly tilts from word to word, and each part of a novel—each word, sentence, paragraph—depends upon every other part like the cunningly stressed beams leaning together without nails in the tower of the cathedral at Ely. Only by the use of certain words, these and no others, can the writer express his private way of seeing. Only by working his way toward those words and not being satisfied until he finds them can he do justice to whatever the unconscious has given.

I said above, "the unconscious would seem to give the novelist, if he will allow it to. . . ." But how does the writer open himself to the offerings of the unconscious? If a seed has been planted, if within the novelist something is unfolding, I think he would do it by maintaining receptivity and a state of general and attentive awareness for as long as he senses it necessary, for years perhaps. By never forcing. By intellectualizing as little as possible. And if there is a block, by waiting in unparticularized expectancy. Intuiting the whole seems infinitely preferable to making aggressive determinations. For this state of mind means that thinking will take over when the novelist begins writing character sketches, drawing up schemes and outlines, making diagrams of plot structure, and writing out family histories. All of this is a far cry from the poetic process involved in the secret and silent, slow and natural growth which

will eventually, in its own good time (if the work is right for the novelist) offer its own solutions. Yet I cannot be dogmatic about this as the only way, for John Rowe Townsend, a highly successful novelist for children, reveals himself in *The Thorny Paradise* as one who, in fact, does make all of the intellectual preparations. However, it may not have occurred to him to tell of his nonthinking phases, such as those Alan Garner underwent in his work on *Red Shift*, during which years went by between writing bouts while he waited to be given further enlightenment as to the way in which his novel should be told.

In discussing an essay by Mary Hanle, Silvano Arieti, in his study of creativity, quotes her as saying, "We cannot get creative ideas by searching for them, but if we are not receptive they will not come."²⁴ Creative work, she believes, demands both a passionate interest, in which ideas are actively welcomed, and a certain degree of detachment. This paradoxical state she sums up as one of "detached devotion," a phrase which seems to me to be precisely right.

Gerard Manley Hopkins's privately created word was *inscape*, a word that for him was charged with meaning just as, for him, the world was "charged

with the grandeur of God." And because it was, he believed that the only way to do justice to it, in Conrad's sense of "doing justice to the visible universe," was to observe minutely, to take in and to express the inscape of every created thing, the essence of it. Slowly his word *inscape*, the central word in his vocabulary and the motif of his mental life, came to mean an inner country that required a devoted seeing into. It is the way in which he explored and expressed his private vision, his singularity, and nowhere has he written more poignantly of his belief than in the lines:

As kingfishers catch fire, dragonflies draw flame;
As tumbled over rim in roundy wells
Stones ring; like each tucked string tells, each hung bell's
Bow swung finds tongue to fling out broad its name;
Each mortal thing does one thing and the same:
Deals out that being indoors each one dwells;
Selves—goes itself; *myself* it speaks and spells;
Crying *What I do is me: for that I came.*

I believe that only by listening for the voice of the unconscious can the artist make something worth his highest effort, for only what he makes in this way will speak truly of his uniqueness, his own *inscape*, something no one else on earth can give. "*What I do is me: for that I came.*"

NOTES

¹ Emily Brontë, *Wuthering Heights*, ed. William Sale, Jr. (New York: Norton, 1963), p. 12.

² William Faulkner, *Selected Letters of William Faulkner*, ed. Joseph Blotner (New York: Random House, 1977), p. 348.

³ Walter de la Mare, *Behold, This Dreamer!* (New York: Knopf, 1939), p. 5.

⁴ Carson McCullers, *The Mortgaged Heart: The Previously Uncollected Writings of Carson McCullers*, ed. Margarita G. Smith (Boston: Houghton Mifflin, 1971), p. 275.

⁵ Brontë, *Wuthering Heights*, p. 72.

⁶ Graham Greene, *The End of the Affair* (New York: Viking, 1951), p. 3.

⁷ Joan Aiken, "Between Family and Fantasy: An Author's Perspectives on Children's Books," *QJLC* 29, no. 4 (October 1972): 326.

⁸ Elizabeth Bowen, *Seven Winters and Afterthoughts* (New York: Knopf, 1962), p. 153.

⁹ Mark Schorer, *The World We Imagine: Selected Essays* (New York: Farrar, Straus & Giroux, 1968), p. 7.

¹⁰ Ibid.

¹¹ Ibid.

¹² Ibid., p. 8.

¹³ Glenway Wescott, *Images of Truth* (New York: Harper & Row, 1962), p. 159.

¹⁴ From a letter to the author.

¹⁵ Virginia Woolf, *Moments of Being: Unpublished Autobiographical Writings of Virginia Woolf*, ed. and with an introduction by Jeannette Schalkind (Sussex, England: Sussex University Press, 1976), p. 81.

¹⁶ Ibid.

¹⁷ Ibid.

¹⁸ John Lehmann, *Virginia Woolf and Her World* (New York: Harcourt Brace Jovanovich, 1975), p. 12.

¹⁹ Bowen, *Seven Winters and Afterthoughts*, p. 153.

²⁰ McCullers, *The Mortgaged Heart*, p. 275.

²¹ Vladimir Nabokov, *Strong Opinions* (New York: McGraw-Hill, 1973), p. 31.

²² Graham Greene, *Collected Stories* (New York: Viking, 1973), p. vii.

²³ Jean Gattegno, *Lewis Carroll: Fragments of a Looking-Glass*, trans. Rosemary Sheed (New York: Crowell, 1976), p. 20.

²⁴ Silvano Arieti, *Creativity, the Magic Synthesis* (New York: Basic Books, Inc., 1976), pp. 345-46.

The Hauslab-Liechtenstein Map

by Walter W. Ristow

Many of the world's great libraries are indebted to private collectors for some of their rarest and most distinctive holdings. Cartographic collections, no less than book libraries, have been the fortunate beneficiaries of the labors of enterprising and discerning individuals who assembled and subsequently presented or bequeathed to institutions noteworthy maps, atlases, and globes. In some instances private collections have been sold to antiquarian dealers or individuals and, in part or in toto, have passed through one or more cycles of collection and ownership before ending in permanent repositories.

The Library of Congress has, over more than a century, acquired by gift, bequest, purchase, and transfer a number of significant collections of cartographic materials. The Faden Collection, comprising 101 manuscript and printed maps relating to the Seven Years' War and the American Revolution,

was part of the working collection of William Faden, England's most prestigious commercial map publisher in the last quarter of the eighteenth century. It was acquired in 1864 with a special congressional appropriation.

Purchased by the Library in 1867 was the comprehensive collection of Americana which had been brought together by the distinguished publisher, historian, printer, and Americanist Peter Force. The holdings include 476 printed and 292 manuscript maps, among which are some of the rarest treasures in the Library's Geography and Map Division.¹ Other noteworthy collections in the division's custody were assembled by British Admiral Lord William Howe; Johann Georg Kohl, nineteenth-century German historian and Americanist; Jedediah Hotchkiss, principal Confederate cartographer of the Civil War; Henry Harrisse, French cartobibliographer of the late nineteenth and early twentieth centuries; and Woodbury Lowery, who gathered together an extensive collection of early maps of Spanish settlements which subsequently were embraced by the United States. In more recent years the division's holdings have been enriched by gifts and bequests from Melville Eastham, late industrial-

Walter W. Ristow is chief of the Geography and Map Division. His most recent publication is *Maps for an Emerging Nation*, in which he provides a historical analysis of commercial cartography in nineteenth-century America and describes outstanding cartographic materials from that period in the Library's collections.

Collection

ist of Cambridge, Massachusetts, who collected cartographic works principally of the sixteenth century.²

The division's latest and most extensive cartographic accession is the Hauslab-Liechtenstein Map Collection, which was acquired in 1975 by transfer from the U.S. Air Force Cambridge Research Laboratories (AFCRL) Library at Hanscom Air Force Base in Bedford, Massachusetts. The transfer brought to the Library of Congress the largest segment of the noteworthy cartographic collection assembled during the nineteenth century by Franz Ritter von Hauslab, one of the Austro-Hungarian Empire's most distinguished students of military science, cartography, geography, history, and art. Hauslab's book, print, and map collections have, for more than a century, been highly esteemed by scholars, antiquarian dealers, and collectors in many countries. Individual pieces and groups of material from the collections have, from time to time, been offered for sale or presented as gifts and have been dispersed among a number of libraries and private collections.

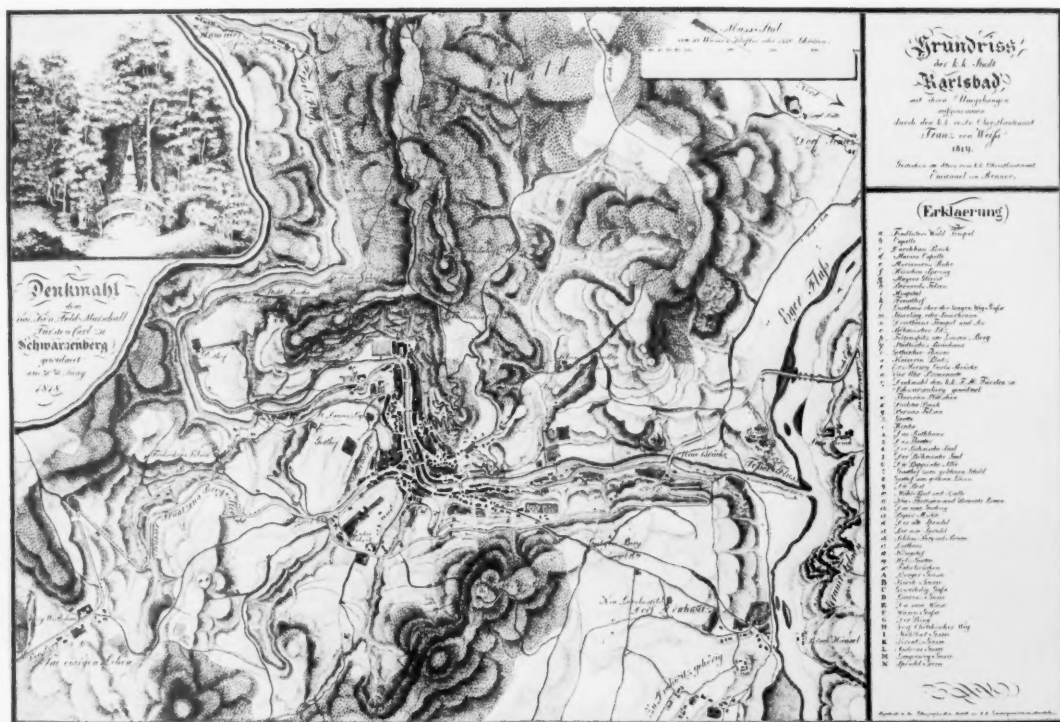


This portrait of Hauslab was probably made around 1855, when he was at the peak of his military career. Geography and Map Division.

Acquisition by the Library of the residue of Hauslab's cartographic collection prompts this review of the long and eventful career of Feldzeugmeister ("master general of ordnance") Franz Ritter von Hauslab and an examination of his many and varied interests and activities, which are reflected in the collection. This report also documents the successive actions which resulted in the fragmentation and dispersal of the Hauslab-Liechtenstein Map Collection, records where identifiable segments or individual pieces are now preserved, analyzes the Library's Hauslab-Liechtenstein accession, and describes a few of its more distinctive items.

Franz von Hauslab

Franz von Hauslab was born in Vienna, Austria, on February 1, 1798, into a distinguished Steiermark family, the paternal line of which had



The Austro-Hungarian general staff early became interested in the applications of lithography to map reproduction. This map of the environs of Karlsbad was prepared by Oberstleutnant Franz von Weiss in 1819 and was engraved on stone by Oberstleutnant Emanuel von Renner. The map was colored by hand. Geography and Map Division. Z62-63687

attained noble rank as early as 1744. His father, also named Franz, was an army officer and artist from whom the son appears to have inherited artistic aptitude. Young Hauslab studied briefly at the Vienna Academy of Art and then in 1809 entered the Vienna Engineering Academy (later the Military Academy), where he was recognized as an outstanding student. In 1815 he was commissioned sublieutenant in an Austro-Hungarian infantry regiment which fought with Czar Alexander I of Russia's forces against French armies commanded by Napoleon Bonaparte. Following the latter's defeat, Hauslab spent several months at an army camp near Dijon, France.

Upon his return to Vienna the young officer joined the staff of the Austrian quartermaster-general and was assigned to a unit engaged in

mapping the Tirol and Vorarlberg. Hauslab's competence and skill in surveying, cartography, and drafting attracted the attention of the Austrian general staff, which at this time was becoming interested in the possibility of applying the new reproduction technique of lithography to map printing. Hauslab was, accordingly, sent to Munich in 1817 to learn about lithography from its inventor, Alois Senefelder. Two years later he was named to a committee chaired by Oberst Ludwig August Fallon which was evaluating the potential military applications of lithography. These early experiences interested Hauslab in printing technology, and he subsequently became familiar with other reproduction processes.

The same year, 1819, Franz von Hauslab was promoted to lieutenant in the Engineer Corps and



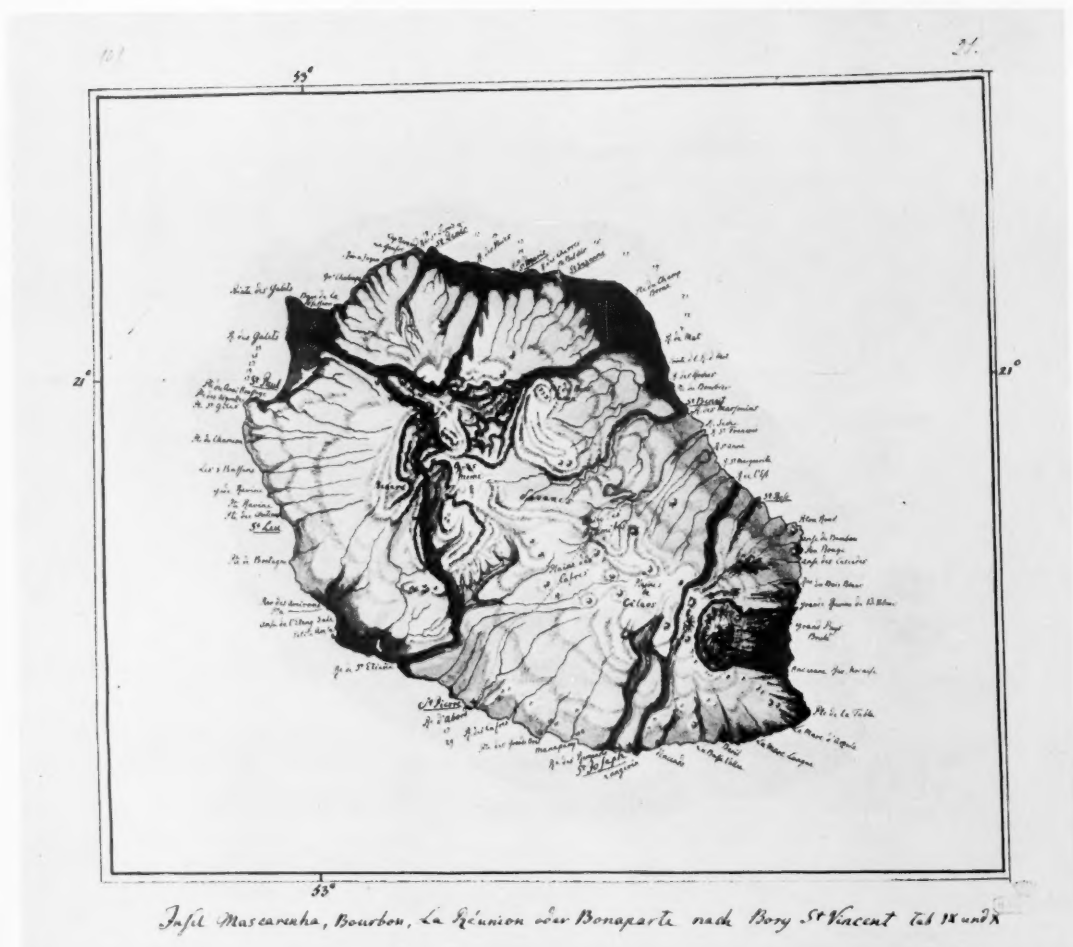
This delicately hachure relief portrayal of Mt. Vesuvius and the adjacent coast and islands of Italy was prepared in 1794 by Anton Rizzi-Zannoni, skilled Italian cartographer of the late eighteenth century. Geography and Map Division. Z62-63688

assigned to teach topographic mapping and drawing in the Engineering Academy under the direction of Crown Prince Johann. Hauslab was then but twenty-one years old. With characteristic industry, he sought to master all aspects of his subject by careful perusal of the monographic and serial literature published in Europe's intellectual and scientific centers. Thus, he learned about the use of contours to show relief and passed this knowledge on to his students and military colleagues. Hauslab served at the Engineering Academy for more than twelve years, during which period he was promoted to first lieutenant in 1821 and to captain-lieutenant in 1826.

Methods of portraying relief on maps continued to interest Hauslab, and in 1825 he introduced a color key which, in combination with contours, por-

trays generalized relief on small- and medium-scale maps. The color key was lithographed. The system employs lighter colors for lowlands and ranges to darker gradients for higher elevations. For water depths the key follows the principle "the deeper the darker." Hauslab's color gradient technique is still employed today for showing generalized relief on some maps.

Interest in relief representation led him to study topography and the development and evolution of landforms. A natural progression from this was to geology, geodesy, and vulcanism, studies he pursued at the University of Vienna concurrently with his teaching assignment at the Engineering Academy. Hauslab also found time to do geologic field work in Steiermark's Erzberg region during the summer of 1827.



Some forty delicately drawn manuscript maps and views of volcanoes, by the famous nineteenth-century German geographer Carl Ritter, are from the Hauslab collection. This reproduction is of Reunion Island. Geography and Map Division. Z62-63689

The young officer also continued his cartographic activities and prepared maps of the city of Baden, Austria, and the environs of Vienna, at the scale of 1:14,400, which were printed by chromolithography in 1828 and 1829. They are among the earliest examples of the application of lithographic color printing to map reproduction.³

Greece's struggle for liberation from Turkish domination during the 1820s stirred European interest in the Middle East and aroused sympathy

for the Greeks. This climaxed on October 20, 1827, when the combined fleets of France, Great Britain, and Russia destroyed Turkish and Egyptian naval forces in the harbor of Navarino (modern Pilos), on the southwest coast of the Peloponnisos Peninsula. Although Austria-Hungary was not involved in the conflict, its leaders were concerned about the possible political effects of the decline of Turkish influence in the Balkan Peninsula. An Austrian naval detachment was accordingly dispatched to

the Middle East shortly before the Battle of Navarino. Assigned to the fleet as an observer was Franz von Hauslab. The experience he gained led to his subsequent assignment, in 1828, as military attaché in the Austrian Embassy in Constantinople. He remained in this post for two years. Residence in Constantinople had so awakened Hauslab's interest in oriental studies and languages, that by the time of his departure in 1830 he had become fluent in Turkish.

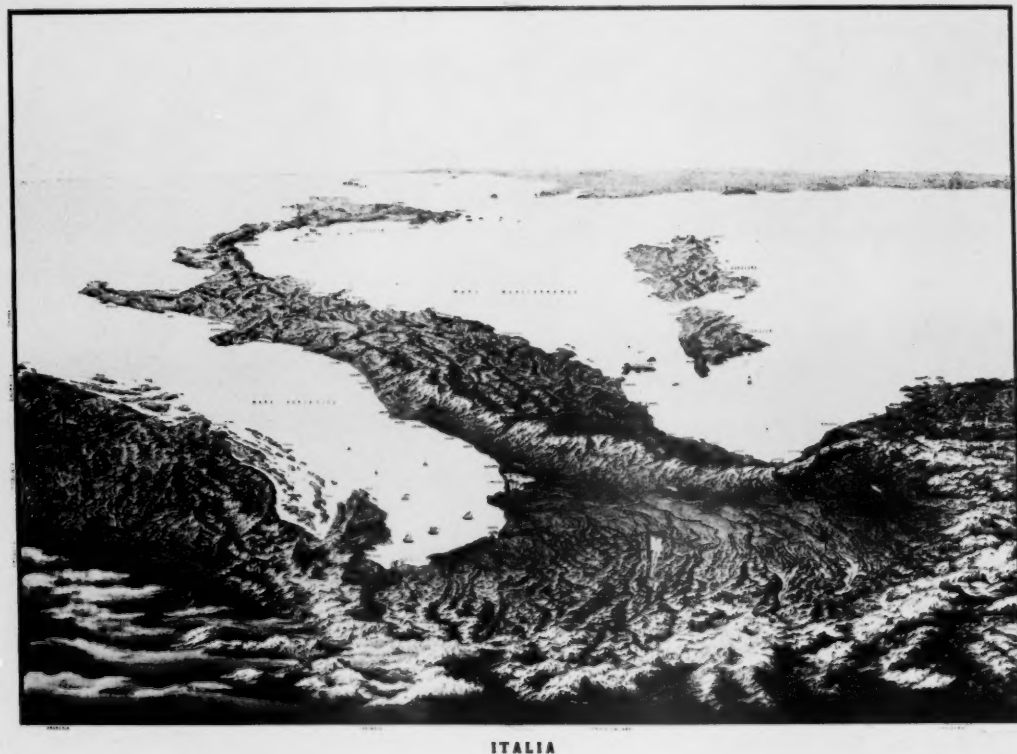
Hauslab resumed his teaching duties in the Engineering Academy upon returning to Vienna. He also continued his own education at the University of Vienna and the Polytechnic Institute, where he

enrolled in courses in botany, chemistry, geology, mineralogy, and physics. In 1834 he also managed to complete a twelve-sheet Steiermark map which he had begun several years before.

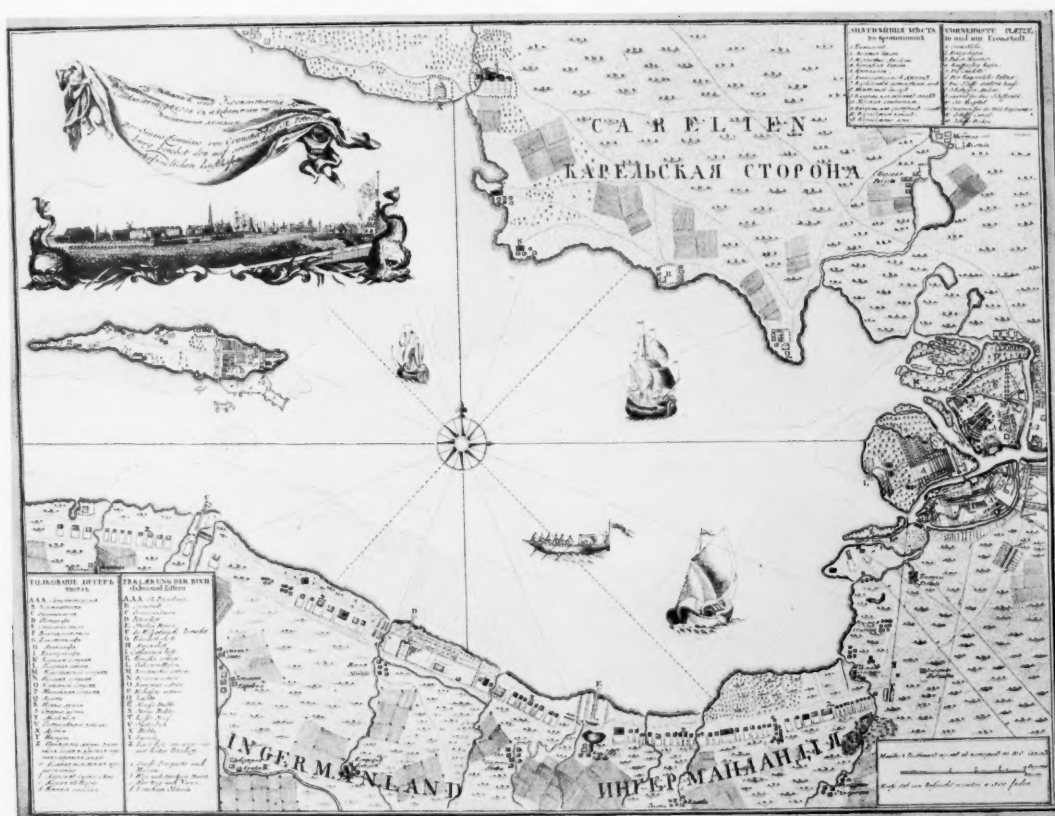
His broadening geographical and intellectual horizons inspired him to acquire pertinent books, prints, maps, and atlases. This practice, which continued over the next half century, produced the distinguished and valuable Hauslab Library, one segment of which is the subject of this paper.

His varied activities and achievements made Hauslab well known to high-ranking officers of the Austrian general staff. He was, accordingly, promoted to captain in March 1833; the following

This perspective view of Italy from the north typifies Hauslab's interest in relief representation. This undated map was probably published around 1850. It is interesting to note that this cartographic technique was employed by Richard Edes Harrison in a number of maps prepared for Fortune Magazine during World War II. Geography and Map Division. Z62-63690



ITALIA



Both cartographic collections acquired by the Library include some fine examples of early Russian maps. This attractive map of St. Petersburg and the Gulf of Finland is from the Prince of Liechtenstein collection. Geography and Map Division. Z62-63691

January he was assigned to an infantry regiment, and in August 1835 he was advanced to major. His scientific contributions were also recognized within the Austro-Hungarian Empire as well as in foreign countries. As evidence of the latter, in 1834 he was accepted as a member of the Geological Society of Paris.

From time to time Hauslab's special knowledge and aptitudes were tapped for unique assignments. Thus, in 1834 he was detailed to the royal court to teach principles of military science to the four sons (Albrecht, Karl Ferdinand, Wilhelm, Friedrich) of Archduke Karl. This occupied a major part of his time during the next five years. Because of his

knowledge of Turkish, Hauslab also served as interpreter for the Achmed Fethi Pasha, the official representative of Turkish Sultan Mahmud to the coronation ceremonies for Kaiser Ferdinand I in 1835. To develop closer ties with the Turkish Empire, the Austrian government, in 1836, invited six young Turkish officers to Vienna for study and orientation. Because of his facility with their native language, Hauslab was assigned to serve as their instructor and supervisor. The following year he revisited Constantinople to present the greetings of the Austrian emperor to Turkish Sultan Mahmud.

Franz von Hauslab was one of a small group of Austrian officers selected to observe the extensive

military maneuvers at Vosnesensk, in southern Russia, in 1837. Following the exercises he visited Russian military posts and traveled through the southern part of the Russian Empire, including the Crimean Peninsula. His return to Vienna was a leisurely and educational one, with stops in Smyrna, Syria, Athens, and the Ionian Islands before he terminated the sea voyage at Trieste, at the head of the Adriatic Sea. The journey no doubt helped to augment his book and map collections and expanded his knowledge of geography, political science, and military strategy and tactics.

In 1838 Hauslab was attached to the Austrian chancery and charged with instructing the officers of the Turkish guards stationed in Vienna. During this period he also tutored Princes Ludwig and Friedrich of Baden and continued to instruct the sons of Archduke Karl. In August 1839 he was attached to an infantry regiment commanded by Baron von Trapp, in which he rose to the rank of lieutenant-colonel in June 1840 and to colonel in February 1843.

Hauslab's proficiency as an instructor and his broad and comprehensive background in several disciplines invited further tutoring assignments. Thus, from 1843 to 1848 his students included the two eldest sons of Archduke Franz Karl—Franz Joseph and Ferdinand Max. The former was later crowned Emperor Franz Joseph I of Austria-Hungary, and the latter became Emperor Maximilian I of Mexico.

Soon after his fiftieth birthday in 1848, Hauslab was promoted to major-general and brigadier in Brunn. Subsequently he was given command of the Artillery Brigade of Lower Austria, which was quartered in Vienna. In August 1848 he was made chairman of a committee charged with planning a new arsenal for Austria's capital city.

In 1849 General von Hauslab commanded the Austrian Field Artillery in Hungary, which played a major role in crushing the nationalist revolution directed by Louis Kossuth. For his distinguished performance at the crucial battles of Szőreg and Temesvár, Hauslab was awarded the Military Cross of the Order of Maria Theresa. In further recognition of his military achievements, in October 1849 he was promoted to field-marshal lieutenant and commander of the field artillery and in 1850 he advanced to head of artillery of the Austrian First Army. During the next seven or eight years he earned further promotions, culminating in 1858 with his ap-

pointment as general-director of the artillery corps. The following year he commanded the Austrian artillery on the Italian front.

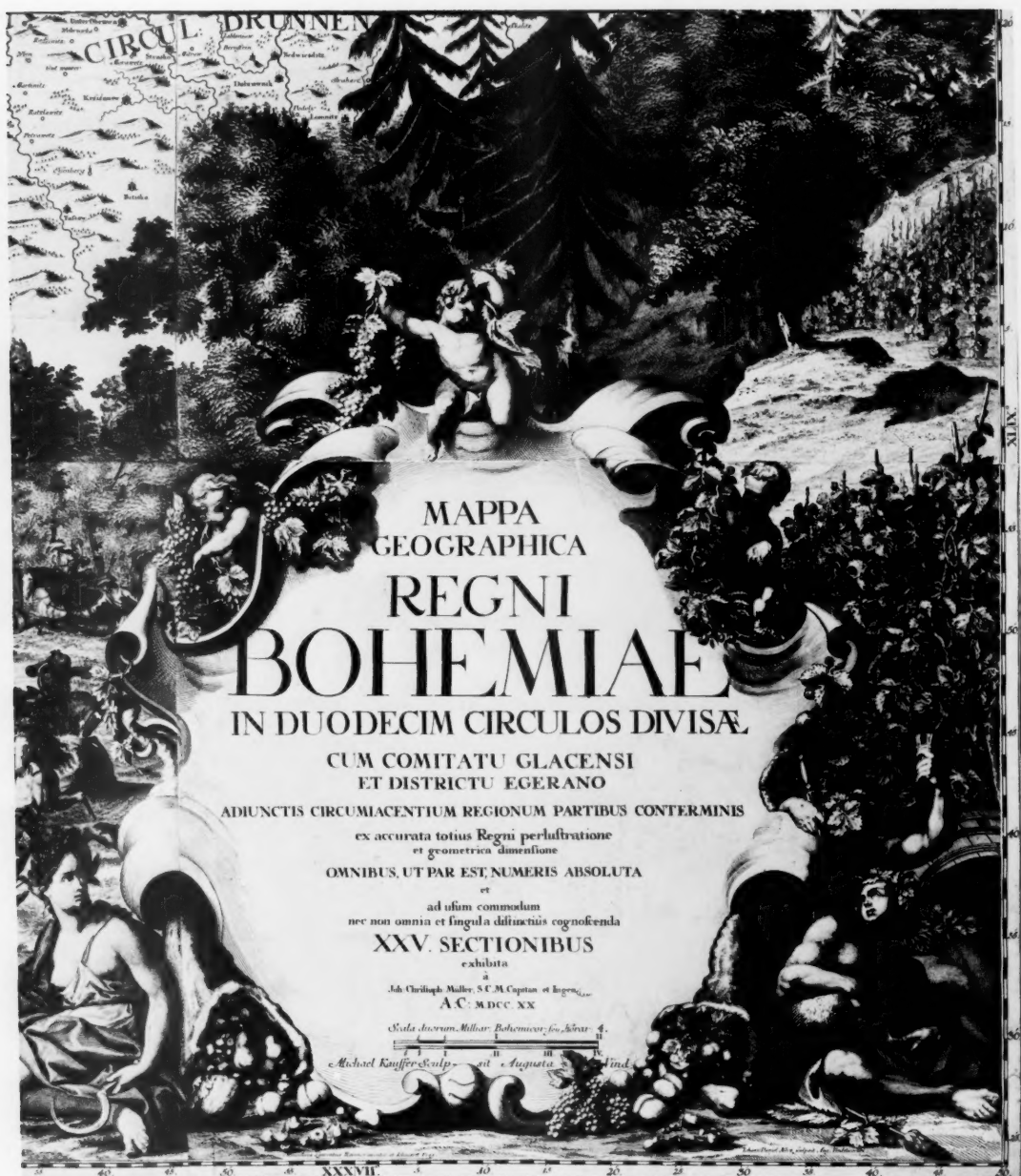
Hauslab was now more than sixty years old, and the rigorous military life had taxed his health. He was, accordingly, relieved of active duty and assigned to command the city and fortress of Prague. This post also proved too demanding for his deteriorating health and he was retired from the army on February 14, 1861, with the rank of feldzeugmeister. The old soldier returned to active duty briefly in 1865 to serve on several military boards. Also in that year he held the office of president of the *Geographische Gesellschaft* ("Geographical Society") in Vienna.

On May 1, 1868, Hauslab was placed on full military retirement. During the remaining fifteen years of his life, he participated actively in various scientific pursuits. His major attention, however, was focused on augmenting and organizing his large and distinguished library of books, prints, and maps. Death came on February 11, 1883, several days after his eighty-fifth birthday.

The Hauslab Library and Map Collection

It is uncertain exactly when Hauslab began assembling his library of books, prints, and maps or what factors motivated him to do so. It is likely, however, that he began acquiring such materials as early as 1820 when he was teaching in the Engineering Academy and furthering his own interests and studies at the University of Vienna. By this time he already had experience in field mapping, had participated in a brief military campaign, and had been introduced to lithography and studied its possible applications to military map reproduction. It is unlikely that at this time in his life Hauslab envisioned amassing a large personal library.

The collections grew, however, along with his widening interests, responsibilities, and travels. Thus, his studies and experiments with relief representation required topographic maps, works on cartographic representation, and books on color perception and theory. Landform studies were stimulated and advanced by acquiring many of the multi-sheet topographic map series that were produced in the several decades following the Napoleonic wars. Hauslab's Turkish assignments considerably broadened his horizons and outlook and stimulated acquisition of linguistic books, maps



This elaborately decorated cartouche illustrates Johann Christoph Müller's rare 1720 map of Regni Bohemiae. Another copy of this map was included in the Houghton Library's purchase of Hauslab-Liechtenstein maps. Geography and Map Division. Z62-63692

of the Middle East, Russia, and the Orient, and historical and archaeological monographs, as well as additional works on geography, cartography, geology, and vulcanism. And there was, of course, the persistent search for military maps and monographs.

The discipline of geography was greatly advanced during the mid-nineteenth century by the contributions of such scholars as Alexander von Humboldt, Carl Ritter, and others. Hauslab certainly was aware of their work and may have corresponded or had personal meetings with these pioneer geographers.

Among his other attributes and skills, Hauslab was a gifted artist, having inherited such talent from his father and grandfather, both of whom were drawing teachers. Franz von Hauslab himself created landscapes, panoramas, and portraits. His artistic leanings prompted his acquisition of numerous paintings, engravings, and prints.

At Hauslab's death in 1883, it is estimated that his personal library included thirteen thousand books, twenty thousand engravings, etchings, and prints, some ten thousand maps, and a number of globes. The library reportedly filled two large rooms in Hauslab's residence at Number 3 Laurenzgasse, in south-central Vienna. Laurenzgasse is today intersected by Hauslabgasse, a street some five blocks in length which is named for the distinguished military geographer.

Although the library was organized by type of material, i.e., books, prints, and maps, the divisions were not rigidly observed, and there was a certain amount of intermixing. Atlases, for example, were in the book collection. A few atlases and certain technical works on cartography, on the other hand, were filed with the map collection. Books were arranged on shelves, and prints and maps were enclosed in large buckram and leather portfolios. All materials were systematically organized, but there apparently was no comprehensive card or book catalog with descriptions of individual items.

Subsequent to 1820, when he is believed to have started his collection, Hauslab undoubtedly purchased current book, map, and print publications dealing with those subjects in which he was interested. This is confirmed by a number of invoices in that portion of the map collection now in the Library of Congress, most of which are from cartographic dealers in Vienna. There are, however, also many retrospective items in the collections, some

dating back to the fifteenth century. It is obvious, therefore, that Hauslab was persistently on the lookout for noncurrent items to augment and enrich his library. It is also quite possible that many items in Hauslab's collections were presented to him by friends, colleagues, and professional associates. As evidence of his interest in the history of cartography, as early as 1859 Hauslab proposed that the Geographical Society of Vienna promote such activity among its members by exhibiting some early maps from his collection.

Although Hauslab was engaged in building up the library throughout his adult life, he was not able to give full attention to the task until after his partial retirement in 1861 and full retirement in 1868. The collections absorbed the major part of Hauslab's time during the last two decades of his life. Working with him in organizing and maintaining the library was Fräulein Laura Bertuch, a native of Gotha, Germany, his faithful and long-time housekeeper and aide (Pflegerin, Betreuerin).

From the residue of the map collection now in the Library of Congress it is possible to make only a general determination of the system employed by Hauslab to organize and file his maps. As previously noted, the maps were originally preserved in some seventy or more large (75 by 100 cm) portfolios constructed of heavy boards covered with buckram and leather. The portfolios acquired by the Library of Congress were numbered in six different series, with but two portfolios in the smallest group and twenty-four in the largest. The unifying factors of the several series are not clearly apparent, and maps which appear to have common features may be filed in different series. In some portfolios subject was given priority, while in others the arrangement was by administrative or geographical divisions. Within most portfolios maps were inserted in large brown kraft paper folders. On the face of each such folder was written, in large German script, a brief description of its contents, the number of sheets therein and the date span, e.g., "127 Blatt: Topographischer Karten des heiligen Landes, Russland, Americas, Chinesische Karten, Karten von Indien und Dalmatian, Karten von Deutschland. 18 und 19 Jahrh." Subgroups such as lesser political entities were customarily filed in smaller white or gray folders within the larger folder.

Two portfolios contained more than five hundred

The extent of the Austro-Hungarian Monarchy during the early part of Hauslab's life and career is shown on this map published in Vienna in 1805. Geography and Map Division. Z62-63693

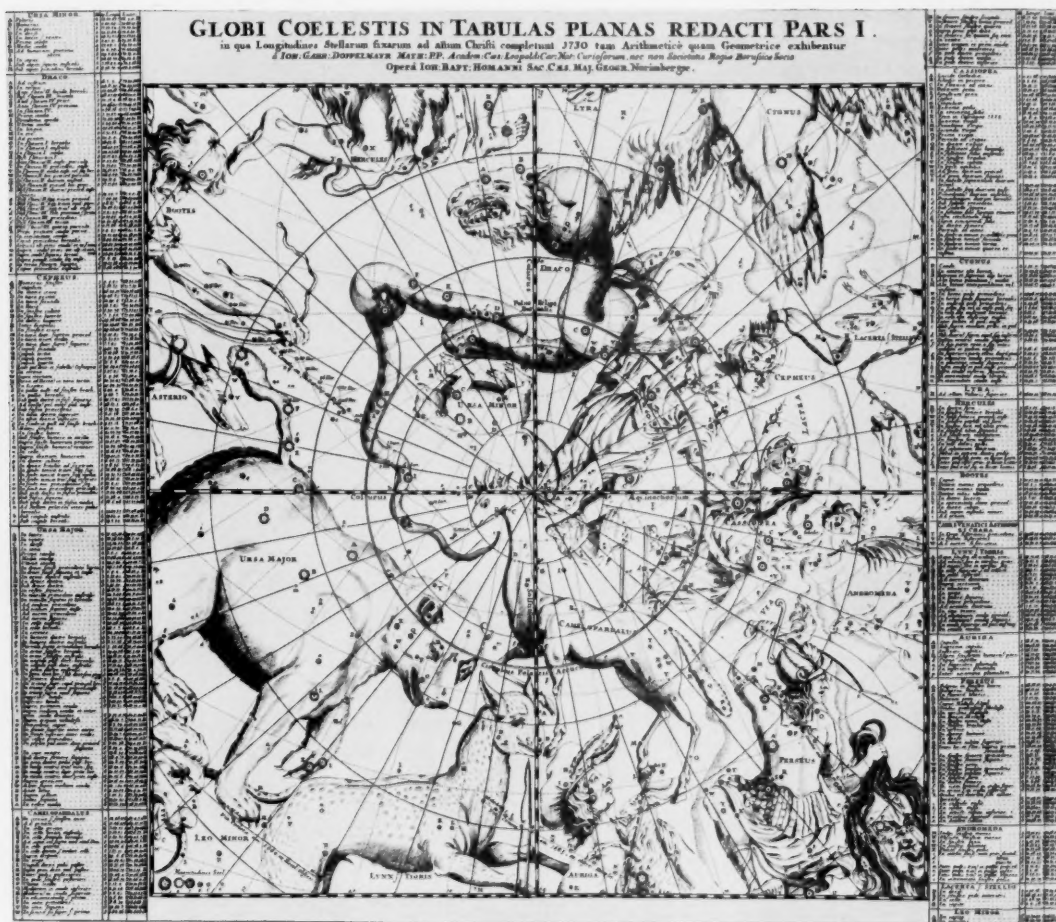


Among the few American maps in the Hauslab-Liechtenstein accession is a series of ten state maps published in 1825 by the Weimar Geographisches Institut. Reproduced here is the map of the State of Georgia. Geography and Map Division. Z62-63694



campaign, battle, and siege maps of the seventeenth, eighteenth, and nineteenth centuries. Some four hundred city plans, arranged alphabetically, occupied two others. *Alte Karten* ("historical maps") were obviously a major interest of Hauslab's, and several portfolios are so labeled. Originals and facsimiles were filed together as *Alte Karten*. Hauslab's area priorities appear to have been Austria-Hungary, with particular emphasis on the Vienna and Tyrol regions, other parts of Europe, the Middle East, Asia, Africa, America, the world, and the celestial sphere.

The Hauslab-Liechtenstein accession includes a number of celestial charts, such as this one by John Doppelmayr, published in 1730. Geography and Map Division. Z62-63695



Dispersal of the Hauslab Cartographic Collection

Franz Ritter von Hauslab's collection of books, prints, and maps were greatly expanded during the last two decades of his life. He spent many enjoyable hours in his library during his retirement years and developed a strong affection for his many interesting and historical maps. He fervently hoped that the library might remain intact and, perhaps, even be augmented after his death. With this objective, and having no direct heirs, on January 28, 1883, just two weeks before his death, Hauslab, by written testament, transferred ownership of his valuable and extensive library of books, prints, and maps to Laura Bertuch. The testament signing was witnessed by a military colleague, retired Feldmarschalleutnant Leopold Freiherr von Weigle, and medical officer Dr. Friedrich Lorinser.

Very probably Fräulein Bertuch sincerely intended to follow Hauslab's wishes and maintain his collection. After his death on February 11, 1883, however, she was subjected to considerable pressure to sell the library that had been presented to her. The Austrian government, several antiquarian dealers, and Prince Johann II von Liechtenstein were, reportedly, among the interested bidders. On July 17, 1883, six months after the death of her benefactor, Fräulein Bertuch signed an agreement with Prince Johann II to sell to him the books, prints, and maps in the library assembled by Franz Ritter von Hauslab. The sale price was 155,000 Austrian gulden. The Liechtenstein purchase embraced old and current books, copper engravings, woodcuts, etchings, lithographs, miniatures, manuscripts, historic and contemporary maps, and a small number of rare globes and globe gores. Not in the sale were manuscript maps, original drawings, and Hauslab's personal papers and writings. Most of the latter material was acquired by the Austrian Military Archives in 1922.

Three years after its purchase by the prince of Liechtenstein, the Hauslab map collection was analyzed in considerable detail by Carl Haradauer Edler von Heldendauer, director of the map department in the Austrian Kriegs-Archiv and librarian of the Geographical Society of Vienna.⁴ In his essay, Haradauer detailed the long and eventful career of the distinguished military geographer and described the noteworthy collection by major groups



Vaduz Castle, parts of which date back to the twelfth century, residence of reigning Prince Francis Joseph II of Liechtenstein, is perched on a steep mountainside overlooking the capital city of Vaduz. The castle houses the renowned Liechtenstein art collection and library. Geography and Map Division. Z62-63696

(e.g., *Weltkarten, Alte Karten und Stadtpläne, Verschiedene Manieren der Darstellung auf Karten, and Schichtenkarten*).

Haradauer estimated that the Hauslab library, when purchased by Prince Johann II of Liechtenstein'sche Kideikommissbibliothek, published in and lithographs, and 4,500 map sheets. However, a summary of the holdings of the Fürstlich Liechtenstein'sche Fideikommissbibliothek, published in 1915, gives the following figures for the Hauslab collection: 20,000 volumes, 20,000 prints, and 10,000 maps.⁵ The last figure is more compatible with the number of maps in the segment of the cartographic collection now in the Library of Congress.

Seventeen of the portfolios acquired by the Library, which compact the contents of twenty-four original ones, constitute a separate collection. This group of maps was in the original Liechtenstein Map Collection which was in the princely library from the end of the eighteenth century.⁶ There is a manuscript list of the maps in the original Liechtenstein collection in the Vaduz Castle library. Regrettably, a request by the author to visit Vaduz Castle and examine the list was refused. Maps dating from the sixteenth to the mid-nineteenth century are part of this collection. Many are mounted on heavy paper, and a large number have decorative borders of thin blue tissue outside the neat lines. Small labels have been affixed to the corners of the maps in these portfolios on which are inscribed, by hand, the portfolio number in roman numerals and the map number in arabic numerals.

During the years the Hauslab-Liechtenstein Map Collection was at the AFCRL Library, a short-title catalog was made of the maps in this group

of portfolios. The catalog describes some 620 titles in 2,400 sheets. In the numerical sequence approximately 635 numbers are lacking, indicating that many items originally in these portfolios were dispersed before this portion of the Hauslab-Liechtenstein Map Collection was purchased by the AFCRL Library.

The seventeen portfolios under consideration here were more systematically arranged and in better order than were those in the remainder of the collection.

The original Liechtenstein map collection differs from that assembled by Hauslab in the following manner: many sheets in the Liechtenstein group are backed with heavy paper and have blue tissue affixed to their borders, apparently as a unifying feature; each map in the Liechtenstein collection is

Carte Routiere de la France, published in 1792, is representative of the blue-bordered maps preserved in the original Prince of Liechtenstein cartographic collection. Geography and Map Division. Z62-63697



identified with a portfolio number in roman numerals and a sheet or map number in arabic numerals; the Hauslab maps show heavier use and are less well preserved; the Hauslab ownership stamp does not appear on the maps in the Liechtenstein group; the arrangement in the Liechtenstein collection is based exclusively on administrative geographical divisions, whereas some maps in the Hauslab collection are grouped by type of map or subject, such as city plans, military maps, relief representations, topographic maps, and volcanic maps.

Fürstlich Liechtensteinsche Fideikommissbibliothek

The nobility of the Liechtenstein family dates from 1608 when Charles of Liechtenstein attained the rank of prince. The princely house, however, lacked landed property of sufficient extent to claim a seat in the Austrian Diet. To remedy this, Prince John Adam Andrew of Liechtenstein purchased the Lordship of Schellenberg in 1699, and the County of Vaduz in 1712. The two territories were united in 1719 as the Imperial Principality of Liechtenstein.

The princes of Liechtenstein rarely visited their country, however, and continued to reside in Vienna until 1938, when the present head of the family, Prince Francis Joseph II, took up permanent residence in Vaduz Castle, the administrative focus of the small principality.

Liechtenstein remained a state of the Holy Roman Empire until 1806, when it was incorporated within Napoleon's Rhenish Federation. The principality became part of the German Confederation in 1815 and retained this status until 1866. A customs union, established with Austria in 1852, remained in force until the dissolution of the Austro-Hungarian Empire in 1918. Since January 1, 1924, Liechtenstein has been within the Swiss customs union.

The renowned Liechtenstein Library and Art Collection, one of the richest in private ownership, had its origins in the last quarter of the sixteenth century, on the initiative of Hartmann II of Liechtenstein. Subsequent heads of the family enlarged the artistic and bibliographic holdings by purchasing individual pieces and collections during the next several centuries. After the Principality of Liechtenstein was created in 1719, the distinguished collection was licensed as a *Fideikommissbibliothek* ("hereditary trust library").

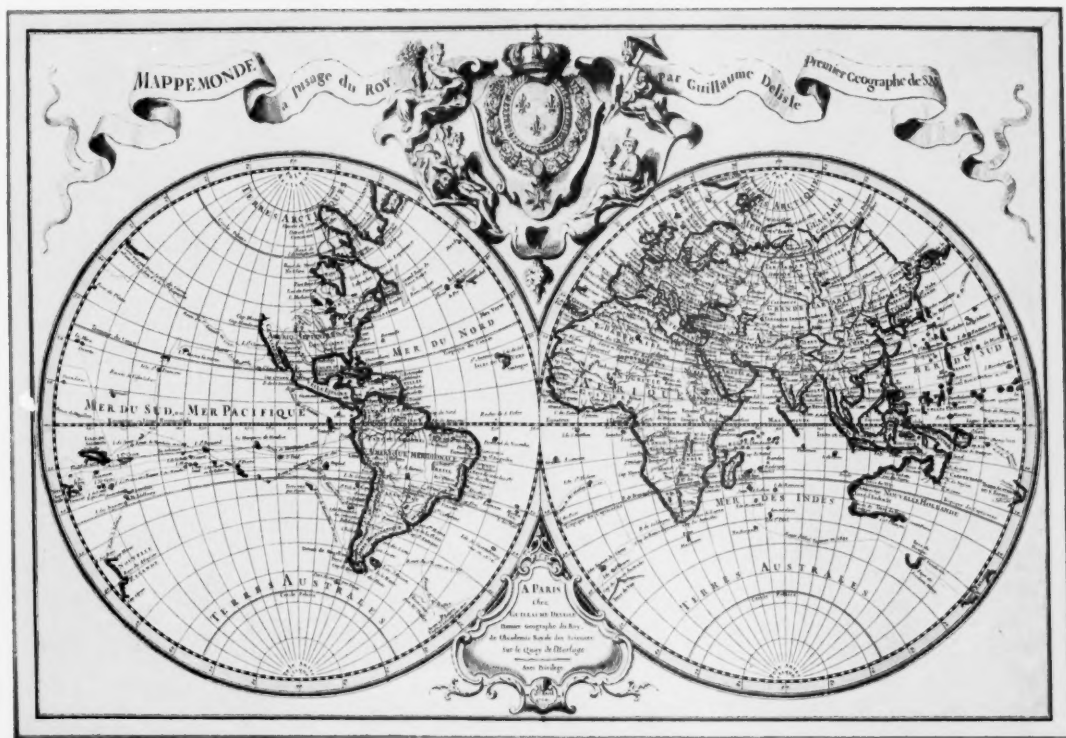
The Liechtenstein map collection noted above may have originated during the reign of Prince Francis Joseph I (1772–82), and items were apparently added to it through the reign of Prince Aloysius II (1836–58). The earliest map in this collection now in the Library of Congress is dated 1597 and the latest is from 1856.

When Prince Johann II purchased Hauslab's collection in 1883, the principal units of the Liechtenstein Library and Art Collection were still housed in the Gartenhaus Palace in Vienna, and the Hauslab accession was retained there until the end of World War II, when it was removed to Vaduz. Between 1883 and 1899, however, Prince Johann made generous gifts of portions of the Hauslab collection to libraries and museums within and outside Austria. Among the gifts were maps and books which were presented to the University of Vienna Library, the Austrian Military Archives, and the Austrian Education Ministry. In 1893 and 1896 the prince also sold duplicate maps from the collection to antiquarian dealers.

Many of the atlases from the Hauslab collection were apparently incorporated in the Liechtenstein Library. A three-volume author catalog of the library, published in 1931, has a number of listings under Blaeu, Mercator, Ortelius, and Ptolemy, among others.⁷ Some two decades earlier a separate catalog of incunabula in the Liechtenstein Library and the Hauslab collection was published.⁸ There are more than a hundred entries for the latter, of which less than 10 percent are atlases.

Following World War I, the prince sold a number of prints from the Hauslab collection, most of which went to London antiquarian dealers. In 1922 additional gifts were made to Austrian official agencies and unidentified duplicates—most of them probably books—were reportedly sold to Henri de Jongh, an antiquarian dealer in The Hague.

In 1945 the Hauslab collection and other portions of the Liechtenstein Library were moved to Vaduz. Shortly thereafter the balance of the prints, contained in some eighty portfolios, were sold to London dealers. About the same time a number of portfolios housing the Hauslab-Liechtenstein Map Collection were sold to New York antiquarian dealer H. P. Kraus. The Kraus acquisition also included rare globes and globe gores. There is no record of the amount paid by Kraus for the cartographic collection. We may infer, however, that it



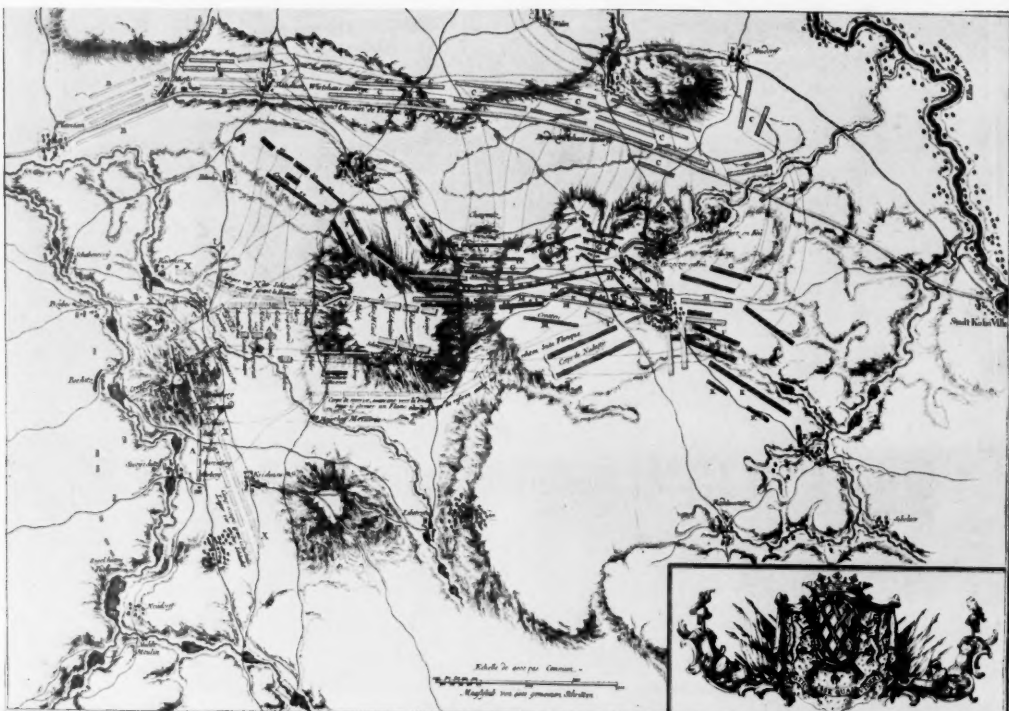
Approximately one-fourth of the maps acquired by the Library were in the original map collection assembled by the princes of Liechtenstein before purchase of the Hauslab Collection in 1883. Many of the maps in the original Liechtenstein Collection, such as this 1720 world map by William DeLisle, are backed with heavy paper, have decorative borders of blue tissue, and have portfolio and map numbers in the lower right corner. Geography and Map Division. Z62-63698

was probably around a hundred thousand dollars.

The dispersal of the map collection did not begin until several years following its purchase, during which period Kraus identified and segregated a number of the more desirable pieces. The Library of Congress was among the early recipients of a Hauslab item purchased in 1950 from the Kraus firm—a large morocco-bound album with a handwritten German title page. In English translation the title reads: "Copper engravings of all kinds of battles and encounters on land, sieges, conquests and the like from Anno 1566 to Anno 1711, 206 pieces, and 33 pieces without dates; also all kinds of sea battles from Anno 1570 to 1705, 16 pieces, and 2 pieces without dates." A coat of arms stamped in blue bears the name of the original owner:

F.Z.M. Fr. Ritter v. Hauslab.

Each of the 250 broadsides in the album consists of an upper part (woodcut or copper engraving) which portrays a historical event and a lower part with printed descriptive text. Fifty-five of the broadsides were analyzed by Renata Shaw in a paper published in the January 1975 issue of the *Quarterly Journal of the Library of Congress*.⁹ A number of the broadside illustrations are cartographic in appearance and show, in perspective or vertical representation, battles, cities under attack and siege, and army encampments. The broadside album is in the custody of the Library's Prints and Photographs Division. There are several similar broadsides in the Hauslab materials now in the Geography and Map Division.



A b r i ß
 der Schlacht bey Krascebor, zwischen Planian und Tollin in Böhmen,
 zwischen der Kaiserl. Königl. Armee unter dem Commando
 Sr. Excellenz des Herrn General-Feld-Marschalls
Seopold Grafen von Daun,
 und der Preussischen Armee, die der König in eigener Person anführte,
 bey welcher die Kaiserl. Königl. Waffen den Sieg davon getragen, den 12. Junii 1757.
 Na. Der Durchlaucht X. kaiserl. des Königl. Armee an, welches die Kaiserl. Königl. Armee den 12. Juni 1757.

Erklärung der Buchstaben.

- A.** Die Kaiserl. Königl. Armee den 12. Juni des Nachmittags die Lager bey Krascebor verlassen hatte, um beständig, welche die Preussische Armee angriffen war, zu befehlen: so brach der König. Preussische Armee den Tag herauf als den 17. gleichfalls aus ihrem Lager bey Chotusow auf, und legte sich gegen die Durchlaucht zu auf der Rechten hinter Planian: General verließerte die Kaiserl. Königl. Armee vielen Mühen noch die Lager, und stürzte sich zwischen den beiden Heeren, die sich unter und rechter Hand befanden, in Schicksel-Ordnung, und zwar in die rechte Lage, wie der Durchlaucht A. angibt.
- Den 12ten stürzte der Feind mehrmals auf einen er-
 wähnten Durchlaucht gegen Planian, um sehen zu
 lassen, was auf beiden Seiten zu sehen war.
- B.** Seine erste Stellung B. zwischen Planian und dem
 Werdtschitz-Schlacken: des Nachmittags aber ge-
 gen 7. Uhr legte er sich längs der Durchlaucht in A.
 zwischen von neuen in Bewegung, und nahm die
 zweite Stellung C. ein.
- Seine Excellenz der Sr. Reichsmarschall Graf Leopold

- von Daun, wurde nicht so sehr geschickt, als die
 Schlacht der Heere sehr gering, dem rechten Flügel der
 Kaiserl. Königl. Armee in die Flanken zu setzen, als
 zwischen (sich) das Corps de Reserve, und der ge-
 meine Flanke haben sich, mit Verlust beider
- D.** Die Flanke D. zu formiren und den rechten Flügel
 zu beschützen.
- Der General der Cavallerie, Graf Törring, be-
 stand sich gleichfalls mit den unter seinem Commando
 stehenden Fußtruppen und Kräften auf dem rechten Flügel
 der eben angestrichenen Flanke, wie man
 bey E. sehen kann.
- Während der Zeit blieb der erste Zueg beständig in
 dieser schlackigen Lage. Mit aller der Feind seine ge-
 wöhnliche Stellung einnahm, und auf einmal seinen
 linken Flügel in verführerischen Colonnen auf die ge-
 meine Flanke und den rechten Flügel der Kaiserl.
 Königl. Armee angriffen zu lassen, so schickte sich
 die erste Linie während dieser Bewegung des Feindes
 gegen den rechten Flügel, blieb an die eben erwähnte
 Flanke an, und nahm endlich

- F.** des Nachmittags gegen 7. Uhr die erste Stellung F. ein;
 und des Commando: Unter nahm darauf von beiden
 Seiten seinen Befehl.
- Dem ungeduldet stürzte der Feind auf beiden En-
 den des Feindes Krascebor immer näher gegen un-
 sere rechten Flanke und dessen Flanke an, und so
 bald er die von Krascebor erreicht hatte, so stürzte er
 selbst Kopf in Sturm, um dadurch seinen rechten Flügel
 auf den Feind zu bringen, so geschah es, dass unter der
 Kaiserl. Königl. Armee zu gleicher Zeit angriffen.
- Um halb vier Uhr that der Feind den dritten An-
 griff auf die Flanke, an dem Orte der mit G. be-
 zeichnet ist, und gleich darauf auch auf den rechten und
 linken Flügel der Armee: einige hundert Mann In-
 fanterie, die ein halbes Bataillon quarte formirten,
 brachen los.
- H.** durch die Flanke H. durch: Wäre die Kaiserl. Kö-
 nigl. Cavallerie und das Schloß Regiment Garde
 de Corps traten vorübergehend, um L. I. angestrichen.
- Der Feind verlor seinen Angriff zu sehen mehr:
 letzter malen auf den rechten Flügel, und die Flanke

- der Kaiserl. Königl. Armee: allein die Kavallerie der
 Kaiserlichen Truppen genug befehlen einem so
 wohl der, als an einem sehr andern Orte parir-
 zu werden, und ihnen den verführerischen Weg zu über-
 lassen: die Kaiserl. Königl. Armee nahm darauf
 K. die zweite Stellung K. ein, welche durch die rechte
 Flanke bezeichnet ist. Mit der Feind verführerisch ge-
 wendet sich parir zu geben, so stürzte er ebenfalls die
 letzten Flanke Krascebor und Krascebor in Sturm.
- Der König in Person befand sich während der
 Schlacht auf der Rechten L. und machte von da aus
 seine Anordnungen.
- Während des Tages bis um 9. Uhr der Feind
 geschmettert hatte, so wuchs der Feind feindliche Flügel
 gegen das Dorf Werdtschitz, und der Feind hatte das
 Werdtschitz-Schlacken gegen Thunburg zurück.
- Der Kaiserl. Königl. Armee-Feind durch die ganze
 Nacht während in Schicksel-Ordnung in seiner Stel-
 lung auf der Rechten M. sehen.
- Den 13ten stürzte befehlige wieder in sein Lager
 Lager bey Krascebor ein.

Wien, Prag und Triest,
 in Kaden des Johann Thomas Trattner, Kaiserl. Königl. Hofbuchdruckers und Buchhändlers. 1757.



Broadside of the Battle of Krzeczor in southern Poland, which was fought on June 18, 1757. This is the only broadside of this type in the Geography and Map Division's Hauslab-Liechtenstein accession. Some 250 such broadsides, also from the Hauslab-Liechtenstein Collection, are bound in an album, now in the Library's Prints and Photographs Division. Geography and Map Division. Z62-63699

Among the rarest items in the Hauslab-Liechtenstein Map Collection were Martin Waldseemüller's globe gores, dated 1507, which like the large Waldseemüller world map of the same date, include the name "America." The map, globe gores, and a small book entitled *Cosmographiae Introductio*, also published in 1507, are generally credited with having the name "America" impressed on the Western Hemisphere continents. It is not known how or when Hauslab acquired the 1507 gores, but they were long recognized as one of the brightest stars in the Hauslab-Liechtenstein Map Collection. Haradauer, however, did not mention the Waldseemüller gores of 1507 in his 1886 article referred to above.

In 1950 New York's Parke-Bernet Galleries issued a catalog announcing an auction, to be held on May 24 of that year, at which "The Martin Waldseemüller Hauslab-Liechtenstein Globular Map of the World on Which the Name America Appears for the First Time" would be offered. A notice on the verso of the title page states: "The consignor has advised us that a previous *bona fide* private offer of \$50,000 (fifty thousand dollars) for the map has been received and declined. Bidding at the sale will in consequence begin above this figure, and if no bids in excess of \$50,000 are received, the map will be withdrawn." The "consignor" in this instance appears to have been the prince of Liechtenstein.¹⁰

Apparently no bids in excess of \$50,000 were received at the Parke-Bernet auction. In October 1954 it was announced that the Waldseemüller globe gores had been acquired by the University of Minnesota library's James Ford Bell Collection.¹¹ The transaction was negotiated with the James Ford Bell Library by the prince of Liechtenstein's agent.¹² There is no record of the sale price of the gores, but it was probably less than the original gallery estimate of \$50,000.

When listed in the 1950 Parke-Bernet catalog the Hauslab-Liechtenstein Waldseemüller global

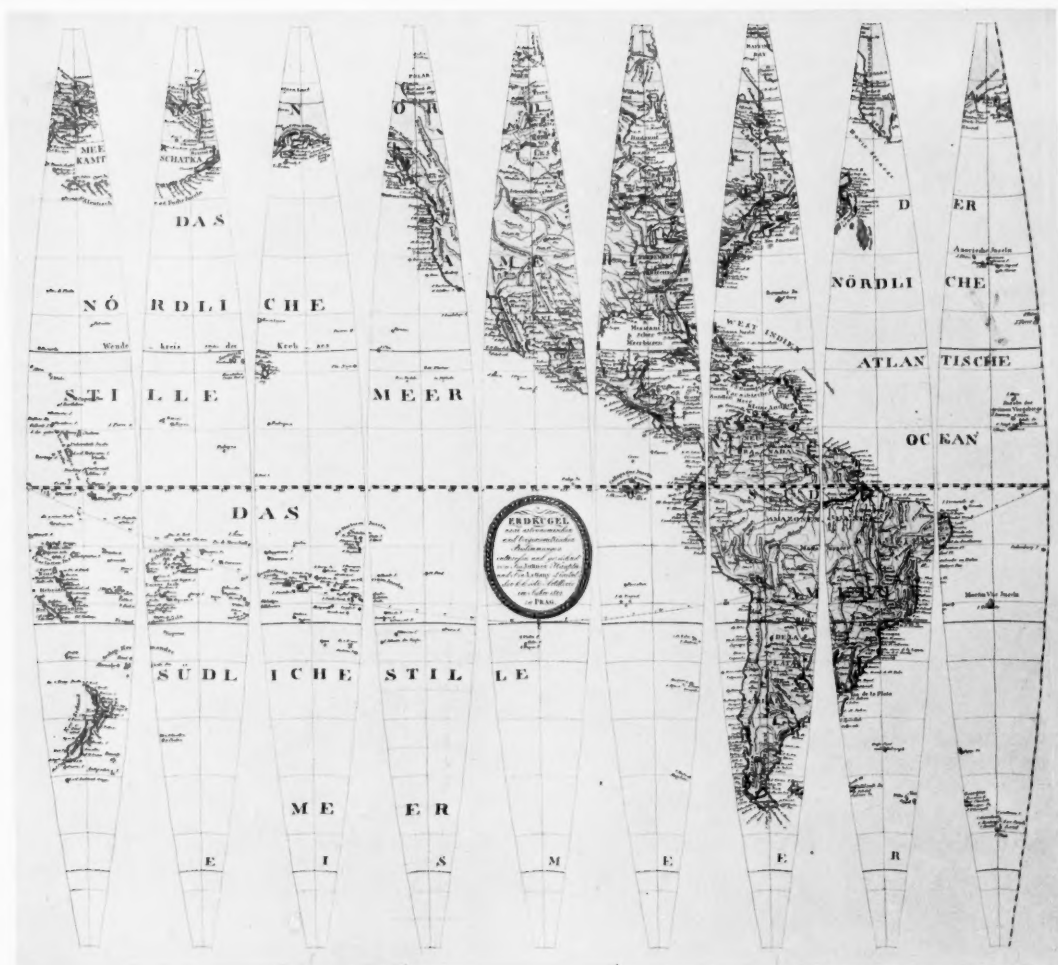
map was described as "the only known copy." Dealer Kraus, however, subsequently acquired a second set of the gores, which are bound in a copy of the 1486 Nicolaus Germanus edition of Ptolemy's *Cosmographia*, which was published in Ulm by Johann Reger. This copy is described as "item No. I" in *Globes and Globe-Gores, the H. P. Kraus Private Collection*, which was published in Ridgefield, Connecticut, in 1969 as a supplement to *Monumenta Cartographica*, Kraus catalog 124. No additional extant copies of the 1507 Waldseemüller gores have been reported.

Among the nine entries in the Kraus globe catalog are manuscript terrestrial globe gores on paper "from the Hauslab-Liechtenstein Collection" (cat. no. IX). It is assumed that the gores were prepared to order for Franz von Hauslab by an unidentified cartographer between 1835 and 1840.

Two other items listed in the Kraus globe catalog were also from the Hauslab-Liechtenstein Collection. Item IV comprises a pair of terrestrial and celestial globe gores prepared in the late sixteenth century by Joannes Oterschaden, and item VIII consists of Louis Charles Desnos's terrestrial globe gores published in 1757. Items IV and IX, as well as four other items in the Kraus globe catalog, were purchased by the University of Texas's Humanities Research Center Library.¹³ Hauslab's interest in and contributions to the history of early globes were noted by Oskar Regele in an article published in *Der Globusfreund* in 1953.¹⁴

Kraus catalog 56, published in 1951, offered *Choice Manuscripts, Books, Maps and Globes Important for the History of European Civilization and the Discovery of America*. The subtitle called attention to "Illuminated Codices, Early Drawings, Incunabula and Illustrated Books, Remarkable Maps from the Prince Liechtenstein Collection and Globes from a Private Library." Part II of the catalog, including items 17 to 28, is subtitled "Early Cartography of America, twelve great maps illustrating the progress of geographical knowledge of the New World selected from the recently acquired Hauslab-Prince Liechtenstein Collection of Maps."

The items described in this section of the catalog range in date from 1518 to 1659 and include two sets of globe gores, a manuscript portolan chart of the east and Gulf coasts of America, a Hondius wall map of Europe, and eight world maps, several of them also wall-sized. Prices for the individual pieces

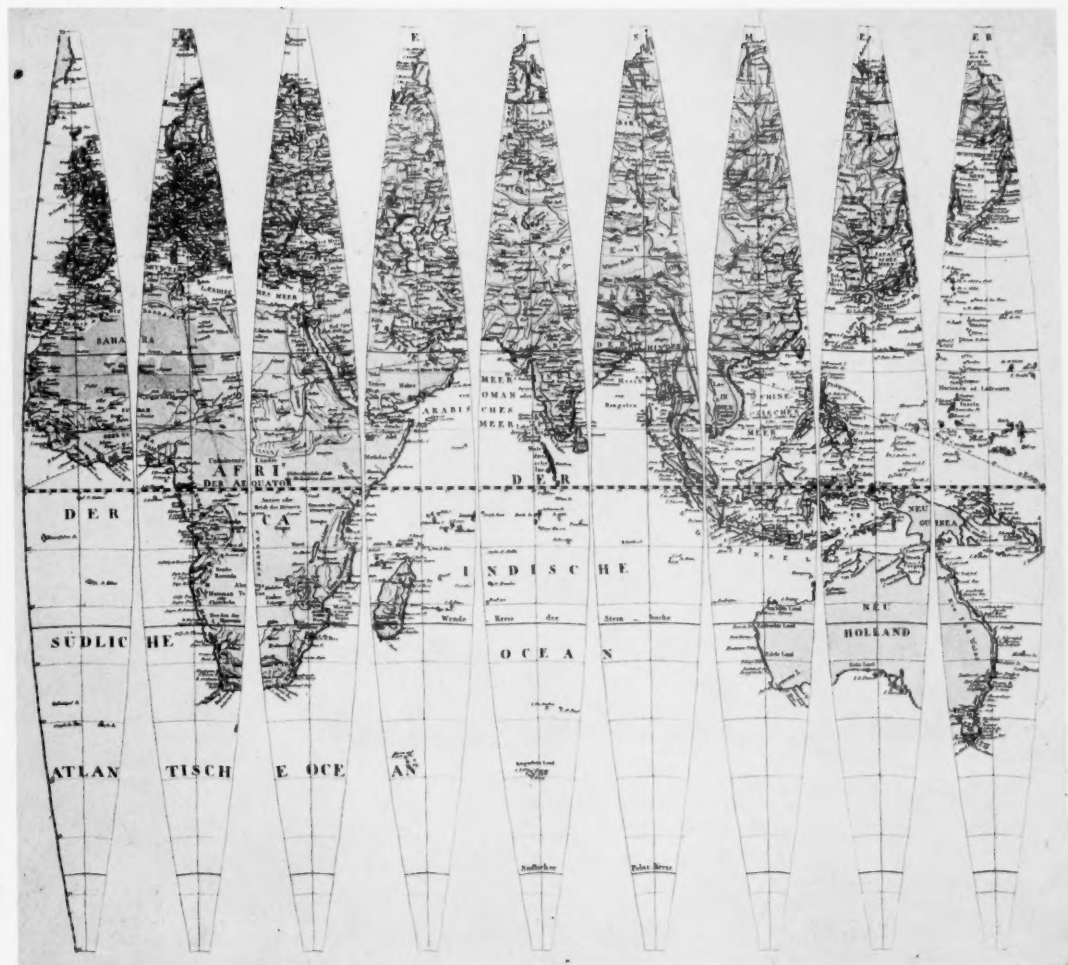


Globes and globe gores were among the cartographic interests of Hauslab, and his collection included a number of interesting pieces. These comprise a set of 1822 gores by Josef Jüttner and Franz Lettany. Geography and Map Division. Z62-63700

ranged from \$900 to \$15,000, with the total for the twelve items adding up to \$67,400. Before any of these pieces were sold, Harvard University's Houghton Library negotiated for the purchase of these as well as an additional 148 rare items from the Hauslab-Liechtenstein Collection. Funds for the acquisition were provided by two loyal Harvard alumni, Stephen W. Phillips of Salem, Massachu-

setts, and Curt H. Reisinger of New York City. There is no record of the price paid for the lot. Based upon the catalog listings for the original 12 items, and noting that many of the other 148 pieces are of comparable rarity, one might speculate that the Houghton sale may have brought the dealer one hundred and fifty thousand dollars or more.

The *Houghton Library Report of Accessions* for



the year 1951-52 (Cambridge, Mass., 1952), under the heading "The Hauslab-Prince Liechtenstein Map Collection," includes this announcement:

This year, through the generous gift of Stephen W. Phillips, '95, and Curt H. Reisinger, '12, the cartographical collection of Prince Liechtenstein was purchased. This addition of over 150 wall and sheet maps, two-thirds of which are of the sixteenth century, brings to Harvard one of the world's great collections of Renaissance maps. A good many of these maps are unique, and very few of them are to be found in any other American collection. Over thirty are wall-maps extending to as many as a dozen sheets, and two are manuscript, a portolan chart of the

Mediterranean by Vesconte Maggiolo dated Naples, 24 August 1513, in its original tin chart-case, and a portolan of the East and Gulf coasts of North America and the Northern part of South America by Nicholas Comberford, 1659.

There are three of the rare pilgrim maps of Europe printed in Nuremberg in the last decade of the fifteenth century and the first of the sixteenth, attributed to Erhard Etzlaub, which are among the earliest maps to have been printed. Included in the dozen sixteenth century world maps are several which are unique, such as the Vespucci, Vopell, Oronce Fine, and Rosaccio, while among the five sets of printed gores for globes are also several unique ones, of which the Ingolstadt terrestrial globe, which is dated



This attractive manuscript copy, prepared by Joseph Peschke in 1795, reproduces a 1763 map of the island of St. Lucie. The Hauslab ownership stamp appears just outside the neat line in the lower right corner. Geography and Map Division. Z62-63701

about 1518, is one of the earliest to name America and is remarkable for its coverage of cartographical information of that date.

The Liechtenstein maps were for the most part collected by General von Hauslab, and although half of them were printed in Italy, they contain a large number of rare maps of eastern Europe, nine, for example, being Russian. They also include seven detailed maps of cities including Moscow, St. Petersburg, Warsaw, and Vienna. The names of their makers are enough to start one's imagination travelling—Herberstein, Vavassore, DeMongenét, Mercator, Hondius, Kyrilov, and Blaeu.

Except for this brief summary of the accession in the 1952 *Houghton Library Report*, there is in the scholarly literature no analytical study as yet of the rare Hauslab-Liechtenstein maps and globe gores now in the Houghton Library. Twenty-one of

the Houghton items were, however, displayed in "The World Encompassed," an exhibition of the history of maps held at the Baltimore Museum of Art October 7 to November 23, 1952. The exhibit, jointly sponsored by the museum, the Walters Art Gallery, and the Peabody Institute, featured cartographic rarities from a number of the country's foremost collections. The exhibit catalog, published by the Walters Art Gallery, includes descriptions of the twenty-one Houghton items as well as reproductions of thirteen of them.

Some of the maps purchased by Houghton were in Hauslab's collection before it was sold to the prince of Liechtenstein. As evidence of this we note that a number were described by Haradauer in his

1886 article on the Hauslab Map Collection which was cited above. The number of Houghton maps which were in the Hauslab or original Prince Liechtenstein Collections is not known.

There is no record of additional Kraus sales of Hauslab-Liechtenstein maps of the magnitude of the Houghton Library's acquisition. His catalog 124, *Monumenta Cartographica* (ca. 1969), however, included eight Hauslab-Liechtenstein items under catalog numbers 1, 11, 14, 16, 18, 19, 21, and 25. Listed prices for these eight pieces totaled \$22,625. The Hauslab-Liechtenstein items, as well as fifty-seven other pieces listed in catalog 124, were purchased by the Humanities Research Center Library. As noted above, this library also acquired six of the nine globes and globe gores (including two from the Hauslab-Liechtenstein Collection) which were described in *Globes and Globe-Gores, The H. P. Kraus Private Collection*, issued as a supplement to *Monumenta Cartographica*.¹⁵

Earlier, in 1951, Kraus sold a large segment of the Hauslab-Liechtenstein Map Collection, containing some eighty-eight hundred sheets, to the AFCRL Library. The reported price was \$12,000. The antiquarian dealer and his staff had apparently previously removed those pieces considered to be of exceptional rarity and value. As noted, special lots of rare maps were sold to the Houghton Library and the Humanities Research Center Library. Additional Hauslab-Liechtenstein items may have been sold by Kraus to other individuals or institutions, singly or in lots. It is also possible that Kraus still has other Hauslab-Liechtenstein rarities in stock, pending future disposal.

The collection of historic maps acquired by the AFCRL Library had little reference value to the Air Force scientists and technologists who were its principal patrons. The librarian, however, had a strong personal and custodial interest in the material. As time permitted during the two or more decades that the maps were in his custody, he compiled a "Short-Title List for Twenty-Six Liechtenstein Folios." In accomplishing this, some of the original Hauslab kraft paper folders were discarded, and the twenty-six portfolios were compacted to seventeen, indicating that some of their contents may have been removed previously. A condensed list, entitled "Dates and Incipits for Twenty-six Liechtenstein Folios," gives dates of individual maps, the first word in the title, and the number of

sheets for multisheet series. A manuscript note on the cover of the condensed list reads: "The folios having very few sheets have probably been denuded for Harvard." This seems to be confirmed by the small number of pre-1700 maps. The seventeen AFCRL Library portfolios contained approximately 620 map titles in some 2,400 sheets. This represents approximately a fourth of the maps in the Library's Hauslab-Liechtenstein accession. All but four of the portfolios inventoried in the AFCRL list constitute the original Prince Liechtenstein map collection and were not part of the prince's Hauslab purchase.

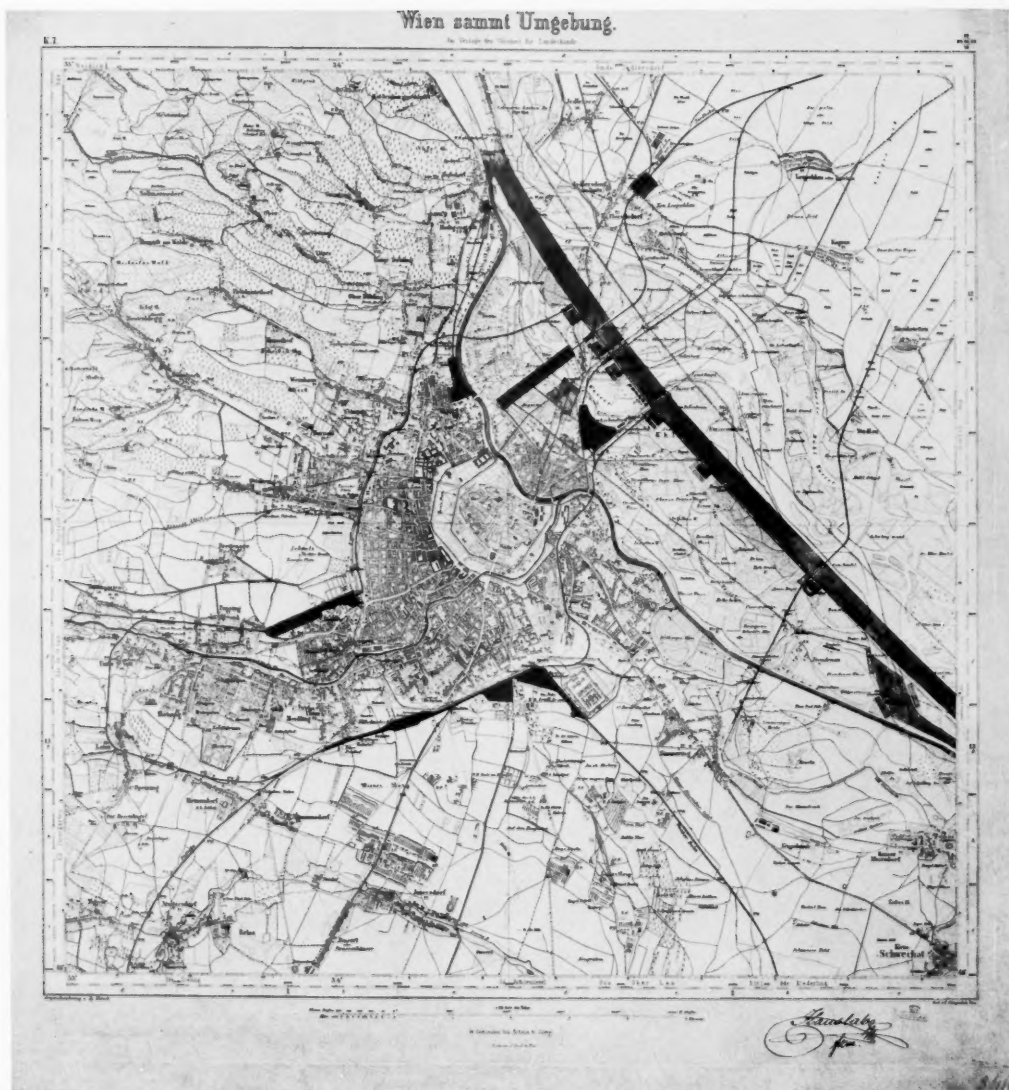
Following a change in library directorship, and with the approval of the commanding officer, Hanscom Air Force Base, the Hauslab-Liechtenstein maps were transferred to the Library of Congress Geography and Map Division in April 1975. Encased in sixty-nine portfolios, they arrived in a large wooden shipping crate which, with contents, weighed more than thirty-three hundred pounds.

The Library of Congress Hauslab-Liechtenstein Collection

A preliminary inventory reveals that the Library's Hauslab-Liechtenstein accession includes approximately thirty-six hundred titles in some eighty-eight hundred sheets. It comprises perhaps 80 percent of the material purchased by H. P. Kraus from the prince of Liechtenstein. Although, as previously noted, some of the choicest items have, in the century since Hauslab's death, been removed, the Library now has custody of the major portion of the cartographic collection assembled by Franz Ritter von Hauslab and the princes of Liechtenstein.

The Library's accession encompasses the world and its various divisions and subdivisions but is strongest in European maps. Hauslab's native country of Austria is particularly well represented, as are the provinces of the country and its capital city, Vienna. There is also good coverage for other areas of the collector's interest, e.g., Russia, Turkey, the Middle East, Italy, and Germany. There are perhaps fewer than two or three hundred American maps, more than half of which are of the southern continent. Most of the limited number of U.S. maps, moreover, were issued by European publishers.

Hauslab's many interests are represented in the special subject maps, with those portraying topography and relief being particularly numerous. Geol-



This map of Vienna and vicinity includes manuscript revisions by Hauslab, as well as his signature. Geography and Map Division. Z62-63702

ogy, minerals, geodesy, vulcanism, ethnography, linguistics, and military science are other subjects cartographically represented in the collection. The collector's early and lifelong interest in techniques of printing and reproduction is reflected in maps reproduced from wood blocks, engraved plates, lithographic stones, and movable type.

Notwithstanding the extensive and comprehensive holdings of the Geography and Map Division, the Hauslab-Liechtenstein accession adds considerable depth and strength to its collections. This is true in part because the Library had no separate map department until 1897. Although there were a number of maps and atlases in the collections before that date, the acquisition emphasis had been on American materials. This was also a primary interest of the first chief of the Division of Maps, Philip Lee Phillips. He also sought after rare and historical materials, particularly atlases, and his efforts are evidenced by the Library's very considerable collection of cartographic rarities. Nineteenth-century materials were not deemed to be of collectible significance during the early decades of the twentieth century. The Hauslab-Liechtenstein accession, with its great strength in nineteenth-century European maps, therefore richly complements the holdings of the Geography and Map Division. Of particular interest are the many multisheet topographic map series issued by official and commercial publishers during the latter decades of the eighteenth century and throughout much of the nineteenth.

The Library's Hauslab-Liechtenstein accession will be retained as a collection, and the individual pieces and series will, in due course, be cataloged in MARC Map, the Geography and Map Division's computer-assisted cataloging system. Therefore, no attempt will be made here to inventory the entire accession. Selected individual pieces and noteworthy series and groups will be described, however, to suggest the character, composition, and quality of the Library's Hauslab-Liechtenstein Map Collection.

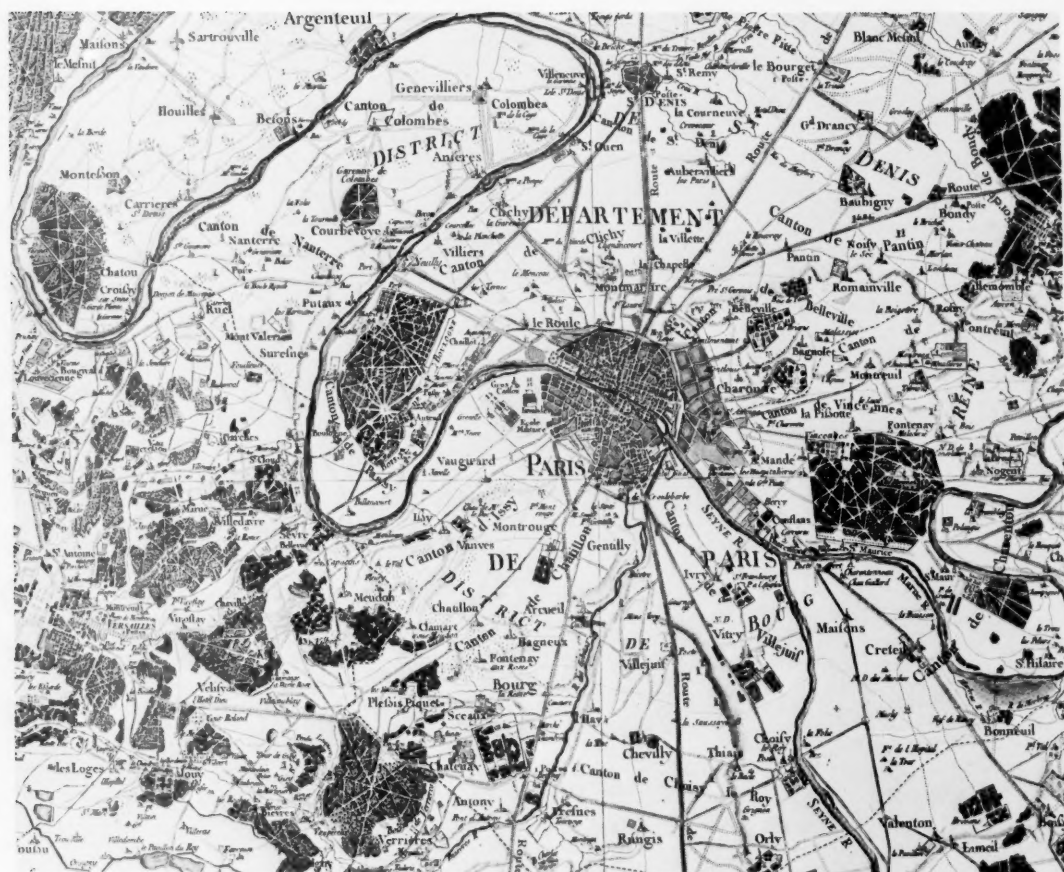
Although there are few individual pieces to compare with the Hauslab-Liechtenstein items purchased by Harvard's Houghton Library, the Library of Congress accession does include a number of separate maps and map series which have great cartographic significance as well as intrinsic value. For example, the collection contains a number of interesting manuscript pieces, including more than forty

delicately rendered chalk and sepia sketch maps, views, and profiles of volcanoes from the pen of Carl Ritter, the notable nineteenth-century German geographer. Other Ritter manuscripts are hand-drawn facsimiles of the thirteenth-century medieval world map by Isador of Seville and Fra Mauro's world map of 1450. Ritter's fellow geographer, Alexander von Humboldt, is represented by a small hand-drawn sketch map of the northern half of South America and two related manuscript graphs.

Although Hauslab's drawings and papers were, reportedly, not included in the sale to the prince of Liechtenstein, several of his manuscripts are in the Library's accession. A group of four manuscript maps of the Steiermark region of Austria demonstrate his skill in portraying cartographic relief. Of particular interest is a map of Vienna, at the scale of 1:28,800, which includes Hauslab's signature, annotations, a tracing paper overlay sheet with revisions, and a handwritten page outlining plans for expanding the city. The annotated map may date from 1848, when Hauslab chaired a committee which was concerned with developing plans for the city's growth. There is also a manuscript tracing of an early Chinese world map which bears Hauslab's signature.

Scattered throughout the collection are a number of unsigned manuscript maps, many of which display a high level of cartographic and artistic skill. Some, dating from the late eighteenth century, are similar in technique and symbolism to the maps prepared by English military engineers during the revolutionary war. A manuscript drawing, on three sheets of tracing paper, carries the title "Manoeuvres und Gefechte zwischen der Esch und dem Mincio am 6^{ten}, 8^{ten}, 9^{ten}, und 10^{ten} Oktobre, 1831." The anonymous manuscript maps, which show various European cities as well as the Bay of Gibraltar, islands, and other features, may have been drawn by some of Hauslab's students or military associates.

Interest in military science and history are reflected in several hundred maps and plans of campaigns, sieges, and battles of the seventeenth, eighteenth, and nineteenth centuries. Two large portfolios hold maps and plans for most of the world's major cities and towns, although North America is only meagerly represented. The plans date from the late sixteenth to the end of the nineteenth century, with the majority in the latter period.

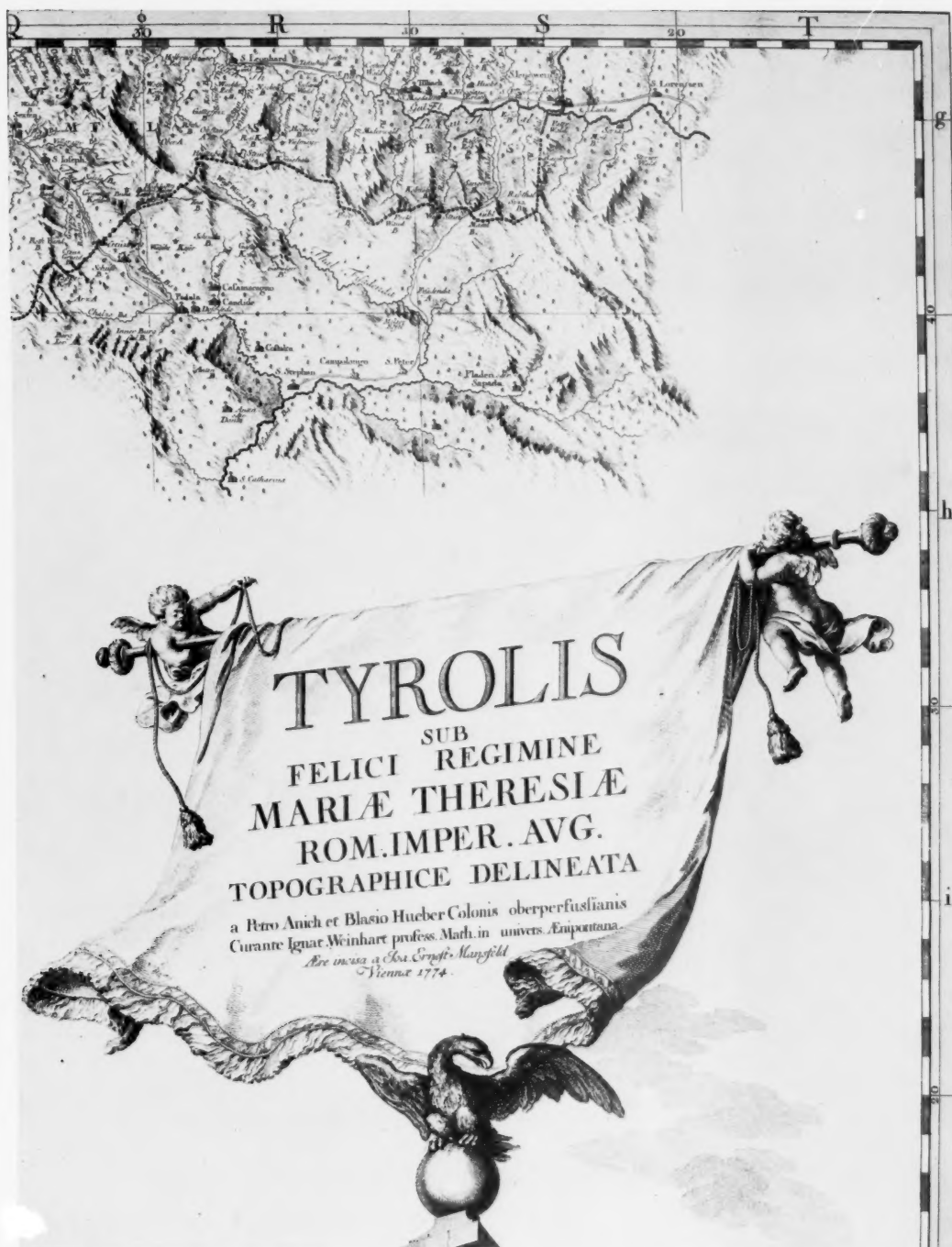


Detail of the Paris sheet of the Cassini Survey of France (1741-1783) at the scale of 1:86,400. The copy of this 180-sheet map now in the Library's Geography and Map Division is printed on heavy paper and is hand colored. Geography and Map Division. Z62-63703

Most are on single sheets, but several, at large or medium scales, comprise many sheets, such as a plan of the central portion of Paris, published in 1739. At the large scale of 1:14,000 is an 1830 plan of Vienna and vicinity, in 150 small sheets, which was reproduced by chromolithography. There is also an 1809 engraved map of Vienna and vicinity in twelve sheets. A seventeen-sheet map of the environs of Ofen and Pesth, Hungary, which was published in 1836, was also lithographed.

There is an interesting 1726 reproduction of a twelve-sheet map of Görlitz (in present-day Czechoslovakia), by Joseph Melsker, which was originally published in 1566. Features are represented in three-dimensional pictorial perspective. Also in the collec-

Title cartouche of the twenty-sheet Atlas Tyrolensis, by Peter Anich and Blasius Hueber, which was published in 1774. The Library's accession includes two copies of this rare map, one preserved in the original Prince of Liechtenstein cartographic collection and the other in the collection assembled by Franz Ritter von Hauslab. Geography and Map Division. Z62-63704



tion are woodcut reproductions of sixteenth-century maps of Nuremberg, Germany, and vicinity and the city of Prague. There is also a four-sheet woodcut map of *Das Landt und Freistift Berchtesgaden*, published in 1628. A copy of this map was included in the Houghton Library Hauslab-Liechtenstein purchase. *Grundriss der k.k. Stadt Karlsbad*, 1819, by Franz von Weiss, was lithographed and hand colored. There are also engraved plans, with tasteful hand coloring, of a number of cities, including Belgrade and Trieste.

We have referred to Hauslab's interest in topographic maps. Residing in the capital of the Austro-Hungarian Empire he was well located for acquiring many of the multisheet set and series maps that were issued during the eighteenth and nineteenth centuries by official and nonofficial publishers. In the forefront of the former was the Austrian general staff, which published a number of detailed series during the early decades of the nineteenth century. Among such series in the Library's Hauslab-Liechtenstein accession are *Herzogtums Salzburg*, published in 1810 in fifteen sheets, a forty-nine-sheet map of the Archduchy of Austria dated 1813, and an 1823 series of Tyrol, Vorarlberg, and Liechtenstein in twenty-three sheets. As a young engineering officer, Hauslab conducted surveys for this last map in 1816.

Examples of nonofficial series are F. A. Schrambl's *Neueste Generalkarte von Deutschland in XXIV Blättern*, published in Vienna in 1797; F. A. Sotzmann's fifteen-sheet *Nordliche Theil des Herzogthums Warschau*, published in Berlin in 1808; and W. Müller's multisheet *Chorographische Karte des Königreichs Hannover*, an 1818 publication.

Several earlier topographic series are of special importance to the history of cartography. Several of these also reflect Hauslab's interest in the Tyrol, and he appears to have made a persistent effort to collect all the map series for this province. One of the earliest is a twelve-sheet woodcut reproduction of Mathias Burgklehner's *Die Fürstlich Grafschaft Tirol*, published in 1611. Also of considerable rarity is *Archiducatus Austriae Inferioris Accuratissima Geographica Descriptio*, by the Tyrolean cleric and cartographer Georg Matthäus Vischer. Included in the Hauslab-Liechtenstein accession are 1670 and 1697 editions of this early topographic map. Both are at the approximate scale of 1:150,000 and are on sixteen small sheets backed with stiff board. The 1670

edition was engraved by Melchior Küsell, and the gravers for the later edition were Jacobus Hoffman and Jakobus Hermundt. There is a place name index for the 1697 version. It is interesting to note that a ten-sheet copy of the 1697 edition, mounted as a wall map, was one of the items in the Houghton Library Hauslab-Liechtenstein purchase. Also acquired by Houghton was a twelve-sheet wall map of upper Austria, by Vischer, whose *Archiducatus Austriae Inferioris Accuratissima Geographica Descriptio*, at a reduced scale on one sheet (80 by 89 cm), is also in the Library of Congress accession. This edition is undated.

Another interesting early topographic map of part of Austria is the twenty-sheet *Atlas Tyrolensis* published in 1774. The map, at the scale of 1:103,800, was prepared by Peter Anich and Blasius Hueber, two farmers who were natives of the village of Oberperfuss, near Innsbruck. Although he had little formal education, Anich became interested in astronomy at an early age. For five years, from 1751 to 1755, Anich spent his weekends in Innsbruck studying mathematics and astronomy with Ignatz Weinhard, a jesuit priest. Anich died in 1766, and the *Atlas Tyrolensis* was completed by Blasius Hueber who had been his fellow townsman's assistant. There are in the Library's Hauslab-Liechtenstein accession two copies of Anich and Hueber's *Atlas Tyrolensis*, which was published in 1774 in an edition of 1,000. In 1801 France's Depot General de la Guerre published a reproduction of the Anich-Hueber map at the approximate scale of 1:140,500. Two copies of this map are also in the Hauslab-Liechtenstein accession. These duplications confirm that the accession includes parts of two separate collections.

The first scientific topographic survey of an entire country, the Cassini survey of France, was initiated in 1741 and completed in 1783. Four generations of the Cassini family were involved in its production. The map was published in 1789 in 180 sheets at the scale of 1:86,400. The copy of the Cassini map of France acquired with the Hauslab-Liechtenstein transfer was printed from engraved plates and is in the Liechtenstein collection portion of the accession. The sheets are hand colored and, in contrast to most extant series of the map, are unfolded. They are mounted on heavy paper. This magnificent map was very probably a presentation copy. The Department des cartes et plans, Bibliotheque nationale, Paris, has only scattered sheets of this series.

Before the Cassini map was published an Austrian military officer, Le Comte Josef de Ferraris, undertook a survey of the Austrian Netherlands (i.e., Belgium) on an extension of the Cassini triangulation network and at the same scale. *Carte Chorographique des Pays-Bas Autrichiens* was published in twenty-five sheets in 1777. A copy of this distinctive topographic map is also in the Hauslab-Liechtenstein accession.

Among early historical maps in the Library's accession are Theodor de Bry's 1596 map of America, Orontius Finaeus's world map of 1531 on the double cordiform projection, and Hartmann Schedel's 1493 *Libri Chronicorum* (zodiac chart), from the Nuremberg *Chronicles*.

There are also a number of facsimiles of early maps such as those reproduced in Edme Francois Jomard's *Les Monuments de la géographie* (1862), of which there is an unbound incomplete set, and an 1882 reproduction of Gerard Mercator's *La Grande Carte de Flandre*, initially published in 1540. Also in the Hauslab-Liechtenstein accession is an unbound copy of the 1859 *Entdeckungsgeschichte Amerikas* by Kunstmann, Spruner, and Thomas.

We have noted Hauslab's interest in lithography and in other media used for reproducing maps. Among early examples of lithographically printed military maps were those produced between 1808 and 1825 by the British Quartermaster-General's Office, Horse Guards, London. There are five Horse Guards maps in the Hauslab-Liechtenstein accession, including the 1808 "Sketch of the Attack upon the French Position at Zambuiera."

Lithographic maps published before 1830 were, with some few exceptions, printed black on white. Some, like their engraved predecessors, were hand colored. As previously noted, a multisheet map of Vienna, published in 1830, was reproduced by chromolithography. During the 1830s, Herders Geographical Institute in Freiburg, Germany, published a series of multisheet maps which employed two-color lithography. They were prepared under the direction of J. E. Woerl. In the Hauslab-Liechtenstein materials there are Woerl series for Central Europe, France, and Württemberg and Baden.

As early as 1776 European printers had experimented with movable type in printing maps. The early efforts produced rather stereotyped and unattractive maps, and the invention of lithography dis-

couraged most further experiments. In 1839, however, Franz Raffelsperger of Vienna published a typographic postal map of Austria in four sheets. He subsequently published other maps by this technique, some three or four of which were collected by Hauslab.

Especially in his later years, Hauslab developed an interest in thematic or special-subject maps and atlases. We thus find in the collection such items as J. Albu's *Hygienisch-topographischer Atlas von Berlin* (1877); C. L. Baur's *Gencographische Karte von Deutschland* (1867); *Sprachkarte von Preussischer Staat* (1861), by Richard Boeckh; *Österreichs Weinbau*, published in 1868 by K. K. Landwirtschafts Gesellschaft, Vienna; and H. Kiepert's *Völker- und Sprachen Karte von Deutschland und des Nachbarländern* (1866).

Other collecting interests of Hauslab's were astronomy and outer space, and there are a number of related charts in the Library's accession. Of particular interest is a small map which portrays the earth as seen from the moon (*Die Erde vom Mond gesehen*). Inset maps visualize Mars and Jupiter as viewed from the moon.

The collection also includes profiles showing elevations and heights of mountains, speleological maps, representations of subsurface mines, historical time charts, mileage tables, world maps at various sizes and scales, and multisheet maps of the courses of the Danube, Lahn, Neckar, and Rhine rivers. Among the relatively few U.S. items is a series of ten state maps, each with descriptive text in German, published in 1825 by Geographisches Institut, Weimar.

Hauslab also resorted to whimsy in his collecting, and the accession includes such cartographic curiosa as a *Whimsical Representation of England and Wales*, portraying these entities as a woman riding on the back of a fish. Also in this category are a map of Europe in the form of Queen Elizabeth (*Europa Prima Pars Terra in Forma Virginis*) and a companion one of Asia as the body of the winged horse Pegasus (*Asia Secunda Pars Terrae in Forma Pegasi*). Other animal cartographic portrayals are *Nova Dilionsis Bernensis Tabula Geographica Ursa offigie delineata*, showing Switzerland as a bear, and the familiar *Leo Belgicus*, with the Netherlands represented as a lion. The copy now in the Library is the Strada version, with German title, described under number 51 in Tooley.¹⁶



Hauslab's collecting interest included such cartographical oddities as this Whimsical Representation of England and Wales, a map of Europe in the figure of Queen Elizabeth the First (Z62-63706), and the Netherlands portrayed as a seated lion (Z62-63707). Geography and Map Division.



En tibi formosa sub forma Europa puella
Viuida facundos pandit ut illa fatus,

MERIDIES.
Ridens Italiam dextra Cimbrarq. sinistra
Obtinet, Hispanum fronte acria solum.

*Pectore habet Gallos, Germanos corpore gestat
Aspidibus Græcos, Sauromatarq. fouet.*



Finally, there is a perspective presentation of Mount Brocken, in Germany's Harz Mountains (*Vue de la Montagne de Broken siue dans le Territoire du Comte de Wernigerode, qui est dans le forêt de Hartz*). This 1749 edition, by Homann, is a plagiarism of L. S. Bestchorn's 1732 map. Popular legend associates Brocken with Walpurgis Night (May 1), when witches assemble on the mountain-top. The map shows a number of witches approach-

ing their destination, riding on brooms.

This sampling of materials from the Hauslab-Liechtenstein accession gives only an incomplete picture of the cartographic riches that have been added to the Geography and Map Division. When cataloged, the Hauslab-Liechtenstein maps and atlases will provide source material for research and study in many aspects of history, cartography, and related disciplines.

In preparing this paper the author has had the assistance and cooperation of the following individuals, to whom he extends his appreciation and thanks: Ilse Hurlt, student at Die Universität Wien, who sent a copy of her unpublished paper "Franz Ritter von Hauslab"; Dr. Johannes Dörflinger, Historisches Institut, Die Universität Wien; Dr. Ernst Bernleithner, Coronelli-Weltbund der Globusfreunde, Vienna; Dr. Friedrich Rennhofer, Direktor, Universitätsbibliothek, Vienna; Dr. Wagner, Direktor, Das Kriegsarchiv, Vienna; Dr. Rudolf

Kinauer, former Direktor, Kartensammlung, Österreichische National Bibliothek; Dr. John Parker, Curator, James Ford Bell Library, University of Minnesota; Evano L. Cunha, Chief, U.S. Air Force Geophysical Laboratory Research Library, Hanscom Air Force Base, Massachusetts; Mrs. Sally Leach, Associate Librarian, Humanities Research Center, University of Texas; and Dr. Gustav Wilhelm, Library of the Prince of Liechtenstein, Vaduz Castle, Liechtenstein.

NOTES

¹ See Richard W. Stephenson, "Maps from the Peter Force Collection," *QJLC* 30 (July 1973):183-204.

² See Clara E. LeGear and Walter W. Ristow, "Sixteenth-Century Atlases Presented by Melville Eastham," in *A la Carte*, comp. Walter W. Ristow (Washington: Library of Congress, 1972), pp. 51-61.

³ Ernst Nischer von Falkenhof, *Österreichische Kartographen, Ihr Leben, Lehren und Wirken* (Vienna: Österreichischer Bundesverlag, 1925), p. 162.

⁴ Carl Haradauer Edler von Heldendauer, "Die Feldzeugmeister Ritter von Hauslab'sche Kartensammlung," *Geographische Gesellschaft, Vienna, Mitteilungen* 29, n.f. 19 (1886):374-95, 433-54.

⁵ Hanns Bohatta, "Die Fürstlich Liechtensteinsche Fideikommissbibliothek in Wien," *Zentralblatt für Bibliothekswesen* 32 (June-July 1915):185-96.

⁶ This information was provided in a letter from Dr. Gustav Wilhelm, Sammlungen des Regierenden Fürsten von Liechtenstein, Schloss Vaduz, Vaduz, Liechtenstein, December 5, 1977.

⁷ House of Liechtenstein, *Katalog der in den Bibliotheken der regierenden Linie des Fürstlichen Hauses . . .*,

3 vols., comp. Hanns Bohatta (Vienna, 1931).

⁸ Fürstlich Liechtenstein'sche Fideikommiss-bibliothek, Vienna, *Katalog der Inkunabeln der Fürstlich Liechtenstein'sche Fideikommiss-bibliothek und der Hauslab-sammlung*, comp. Hanns Bohatta (Vienna, 1919).

⁹ Renata Shaw, "Broadside of the Thirty Years' War," *QJLC* 32 (January 1975):2-24.

¹⁰ Letter from John Parker, curator, James Ford Bell Library, University of Minnesota, July 25, 1977.

¹¹ "Minnesota U. Gets Two Famed Maps," *New York Times*, October 30, 1954.

¹² Parker, July 25, 1977.

¹³ Information in a letter from Mrs. Sally S. Leach, associate librarian, Humanities Research Center, August 25, 1977.

¹⁴ Oskar Regele, "Die Globen des Josef Jüttner (1775-1848) und des Franz Ritter von Hauslab (1798-1883)," *Der Globusfreund*, no. 2 (1953):16-22.

¹⁵ Leach, August 25, 1977.

¹⁶ R. V. Tooley, *Leo Belgicus, an Illustrated List of Variants*, Map Collectors' Series, no. 7 (London, 1963).

Some Recent Publications of the Library of Congress¹

Chinese-English and English-Chinese Dictionaries in the Library of Congress. 1977. 126 p. \$6. Compiled by Robert Dunn of the Chinese and Korean Section of the Orientalia Division. An annotated list of the Library's holdings of Chinese-English and English-Chinese dictionaries and glossaries on all subjects, as well as certain polyglot and multilingual dictionaries that include English and Chinese. The 569 entries are arranged alphabetically under the broad categories of "Special Subject Dictionaries" and "General Language Dictionaries." Author and title indexes are provided.

Exploring American History. 1977. 17 p. Free upon request to the Library of Congress, Printing and Processing Section, Central Services Division, Washington, D.C. 20540. Compiled by Marvin W. Kranz of the General Reference and Bibliography Division. Drawn from the publications accumulated for the preparation of *A Guide to the Study of the United States of America* and its supplements, this list of monographs was chosen to describe many aspects of American history and culture.

Japanese Writings on Communist Chinese Law, 1946-1974: A Selected Annotated Bibliography. 1977. 223 p. \$3.25. Compiled by Sung Yoon Cho of the Far Eastern Law Division of the Law Library. This bibliography comprises materials dealing with Communist Chinese law published in Japan in the Japanese language from 1946 to 1974. It includes monographs, articles appearing in monographs and periodicals, and translations. There are 1,083 entries and an author index which encompasses compilers and editors, as well as translators. Also included is a list of romanized Japanese titles of cited periodicals with English translations.

The Law Library of the Library of Congress: Its History, Collections, and Services. 1977. 47 p. \$2.30. Edited and compiled by Kimberly W. Dobbs and Kathryn A. Haun of the Law Library. A comprehensive guide to the Law Library which delineates its origins and subsequent

development, discusses the vast American and foreign collections in its custody, and describes the facilities and services available to the public. Handsome illustrations from the collection enhance the text.

The Publication of Poetry and Fiction: A Conference. 1977. 162 p. Free to libraries upon request to the Library of Congress, Printing and Processing Section, Central Services Division, Washington, D.C. 20540. Proceedings of a 1975 conference, held at the Library of Congress, on the problems facing authors and publishers of serious poetry and fiction in the United States. Topics covered include trade publication, publication by university and small presses, publication in magazines, and the survival of the writer through support by organizations and foundations.

Thomas Jefferson and the Library of Congress. By Dumas Malone. 1977. 31 p. Free upon request to the Library of Congress, Printing and Processing Section, Central Services Division, Washington, D.C. 20540. An essay from the forthcoming sixth volume of *Jefferson and His Time* by Dumas Malone, a leading participant in the ceremony naming the Thomas Jefferson Building of the Library of Congress. Associating the name of Jefferson with the national library, Malone demonstrates how Thomas Jefferson may be called the "father of American librarianship." A reproduction of Jefferson's letter of September 21, 1814, offering his library to the Congress, accompanies the text.

Thomas Jefferson and the World of Books. 1977. 37 p. Free upon request to the Library of Congress, Printing and Processing Section, Central Services Division, Washington, D.C. 20540. Symposium for the dedication of the Thomas Jefferson Building, with introductory and concluding remarks by the Librarian of Congress, Daniel J. Boorstin, and commentary by Dumas Malone. The symposium includes two essays: "Freedom of Challenge: The 'Great' Library of Thomas Jefferson," by Frederick R. Goff, and "The American Scholar: Emerson and Jefferson," by Merrill D. Peterson.

Uganda: Subject Guide to Official Publications. 1977. 271 p. \$7.25. Compiled by Beverly Ann Gray of the African Section. This subject guide lists official publications of Uganda for the period 1893 to 1974. Within each subject the entries are arranged alphabetically by author and title. Following the main index, which is confined primarily to authors and subjects, there is an index to major series that includes Uganda sessional papers, British command papers, and microfilm series.

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